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PIRACY IN THE HORN OF AFRICA: THE ROLE OF SOMALIA'S FISHERMEN

by

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December 2010

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PIRACY IN THE HORN OF AFRICA: THE ROLE OF SOMALIA'S FISHERMEN

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Submitted in partial fulfillment of the requirements for the degree of

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ABSTRACT

Despite a strong naval presence, piracy off the Horn of Africa (HOA) has been rising at the impressive annual rate of about 100 percent since 2006. Repression at sea does not seem to be working, and it is critical to identify the root cause(s) of piracy before additional counter-measures can be applied with any measurable success.

The rise in piracy off the HOA is blamed by some on the disenfranchisement of Somali fishermen. This paper investigates trends in Somalia's artisanal fisheries over five decades, and finds that the rise in piracy off the HOA is not a direct consequence of a decline in Somali fisheries. Somalia is unique in many ways, and a number of factors there combine to enable piracy to rise in ways unparalleled anywhere else in the world, or at any other time in history. Some alternative counter-piracy options can be explored, even in the continued absence of a strong central Somali government.

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LIST OF ACRONYMS AND ABBREVIATIONS

Africa Fisheries Management - AFMET

Anti-Shipping Activity Messages - ASAM

British Broadcasting Corporation - BBC

Economic Exclusive Zone - EEZ

European Union - EU

Federation of American Scientists - FAS

Food and Agricultural Organization - FAO

Glass- Reinforced Plastic - GRP

Horn of Africa - HOA

Humanitarian Assistance and Disaster Management Agency - HADMA

Illegal, unreported and unregulated - IUU

Indian Ocean Tuna Commission - IOTC

Internally Displaced People - IDP

International Maritime Bureau - IMB

International Maritime Organization - IMO

International Trade Center - ITC

Internationally Recommended Transit Corridor - IRTC

Islamic Courts Union - ICU

Metric Tons - MT

Ministry of Fisheries and Marine Resources - MFMR

Monitoring, Control and Surveillance - MCS

Nautical Miles - NM

Non-Governmental Organizations - NGO

North Atlantic Treaty Organization - NATO

Rocket Propelled Grenade - RPG

Somali High Seas Fishing Company - SHIFCO

Somali National Movement - SNM

Somali Salvation Democratic Front - SSDF

Sports Utility Vehicle - SUV

Transitional Federal Government - TFG

UN Convention on the Law of the Sea - UNCLOS

UN Environmental Program - UNEP

UN Security Council Resolution - UNSCR

Union of Soviet Socialist Republics - USSR

United Arab Emirates - UAE

United Nations Association - UNA

United Nations Development Program - UNDP

United Nations Organization - UN

United States - U.S.

World Concern Development Organization - WCDO

World Food Program - WFP

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I. INTRODUCTION

A. SCOPE AND PURPOSE

The international community has mobilized a lot of resources to deal with piracy in the Horn of Africa (HOA) but has obtained very few results. Task Force 151 and Operation *Atalanta*, created by the United States (U.S.) and the European Union (EU), respectively, are military endeavors entirely dedicated to the fight against piracy in the HOA.¹ Both have been functional for close to two years, and during that period the incidence of piracy in the area has risen from 111 attacks in 2008 to 217 in 2009.² Partial figures for 2010 suggest that the 2009 record-breaking number of piracy incidents around the HOA will likely be surpassed. It is critical to identify the root cause(s) of piracy before additional countermeasures can be applied with any measurable success. This paper uses the process tracing method to investigate economic decline in the fishing sector as a possible cause of the exponential rise in Somali piracy.

B. BACKGROUND

Somalia has been in turmoil for almost 20 years, since the collapse of the state in 1991.³ The country now comprises the breakaway Republic of Somaliland to the north; the semi-autonomous Puntland to the northeast; and a rump state made up of regions in the center and south. Somaliland broke away in 1991 after a three-year civil war, but has not been able to gain recognition from the international community. Puntland became a self-governing entity in 1998, but still considers itself part of Somalia. While Somaliland and Puntland have been relatively peaceful, the rump state has been engulfed in factional and sectarian violence since 1991. The current Transitional Federal Government (TFG),

¹ Stig Jarle Hansen, "Piracy in the greater Gulf of Aden: Myths, Misconception and Remedies," *Norwegian Institute for Urban and Regional Research*, October 2009, http://www.nibr.no/uploads/publications/26b0226ad4177819779c2805e91c670d.pdf (accessed February 19, 2010).

² "2009 Annual IMB Piracy Report," International Maritime Bureau, January 2010.

³ "Country Profile: Somalia," British Broadcasting Corporation, January 1, 2010, http://news.bbc.co.uk/2/hi/africa/country_profiles/1072592.stm (accessed January 16, 2010).

which is the fourteenth of its kind, is as fragile as the previous thirteen attempts at rebuilding a national government in Somalia, and there are no signs that it can stop the violence and reunify the various clans and breakaway regions under one rule.⁴ Despite financial and material assistance from the international community, the current TFG backed by more than 6,000 international peacekeepers is barely holding on to a few blocks of the capital, Mogadishu, and is under increasing pressure from the *Al Shabaab* Islamist group.⁵ Twenty years of instability have pushed many Somalis out of their homeland in search of a better life abroad. Those left behind are caught up in an unending cycle of violence, and millions of them are currently threatened by starvation, producing the worst humanitarian crisis in the world.⁶ Assistance from the international community has been substantial over the years, but the chaos within Somalia has greatly hampered relief efforts. Today, piracy is adding another dimension to the tragedy in Somalia.

Piracy off the long coastline of Somalia (and more recently well out to sea from that coastline) occurs across one of the busiest routes of maritime trade. According to recent estimates, piracy worldwide—of which Somalis contribute more than 50 percent—is costing the global economy between one and sixteen billion dollars a year.⁷ This amount represents a very small fraction of the multi-trillion dollar business of global maritime trade,⁸ but if left unchecked the growing phenomenon could have disastrous economic, political, and security consequences worldwide. Mindful of this, the international community has been multiplying efforts to limit piracy in the region. However, these efforts have not produced the desired results, as piracy has continued to rise at an alarming annual rate of about 100 percent since 2006.⁹

⁴ Jennifer G. Cooke and Richard Downie, "African Conflicts and U.S. Diplomacy: Roles and Choices," *Center for Strategic and International Studies* (January 2010).

⁵ "Country Profile: Somalia."

⁶ Donna Nincic, "Maritime Piracy in Africa: The humanitarian dimension," *Institute for Security studies* (2009), <a href="http://www.iss.co.za/dynamic/administration/file_manager/file_links/18NO3NINCIC.PDF?link_id=23&slink_id=8285&link_type=12&slink_type=13&tmpl_id=3 (accessed January 24, 2010).

⁷ Lauren Ploch, Christopher M. Blanchard, Ronald O'Rourke, R. Chuck Mason, and Rawle O. King, "Piracy off the Horn of Africa," *Congressional Research Service*, April 19, 2010.

⁸ Ploch et al., "Piracy off the Horn of Africa."

⁹ "2009 Annual IMB Piracy Report."

The search for solutions to piracy in the HOA has pushed some to look at the successes in Southeast Asia (especially in the Strait of Malacca) for applicable lessons, ¹⁰ but the differences between the two regions are huge. ¹¹ Firstly, Somali pirates have a playing field of 2.5 million square miles of ocean space, ¹² whereas their counterparts in the Strait of Malacca have only 25,000. ¹³ Secondly, the regional response in the Strait of Malacca was possible because coastal nations there have assets capable of covering the relatively small area. ¹⁴ Somalia has not had a stable government for close to two decades now, and even if it did it would lack the naval assets, as do its stable neighbors in Kenya, Tanzania and Oman, to cover the very vast area of concern. ¹⁵ Thirdly, political will, which was the driving force in the regional arrangements in Southeast Asia, is absent around the HOA. This is because piracy in the HOA is more of a threat to distant economies than to the economies of regional states. It is true that vessels of the World Food Program (WFP) carrying aid supplies to Somalia have been attacked before, ¹⁶ but generally, the victims of piracy in the area have been commercial vessels in

¹⁰ James Kraska,"The Report on the U.S. Naval War College Workshop on Somali Piracy: Fresh Thinking for an Old Threat," April 28, 2009, http://www.usnwc.edu/Research---Gaming/International-Law/RightsideLinks/Piracy-Workshop-2009.aspx (accessed January 20, 2010).

¹¹ Harnit Kaur Kang, "Gulf of Aden vs Malacca Strait: Piracy and Counter-piracy efforts," *Institute of Peace and Conflict Studies*, December 2009, http://ipcs.org/pdf file/issue/IB135-SEARP-Harnit1.pdf (accessed January 17, 2010).

^{12 &}quot;Countering Piracy off the Horn of Africa: Partnership and Action Plan," U.S. National Security Council, December 2008,

http://www.marad.dot.gov/documents/Countering Piracy Off The Horn of Africa - Partnership Action Plan.pdf (accessed February 28, 2010).

^{13 &}quot;Strait of Malacca," *Encyclopedia Britannica*, http://www.britannica.com/EBchecked/topic/359411/Strait-of-Malacca (accessed February 25, 2010).

¹⁴ Ian Storey, "Calming the Waters in Maritime Southeast Asia," *Asia Pacific Bulletin*, February 18, 2009, http://scholarspace.manoa.hawaii.edu/bitstream/10125/7781/3/apb029%5B1%5D.pdf.txt (accessed February 10, 2010).

¹⁵ Recent IMB reports show acts of piracy and armed robbery within the territorial seas of these countries.

¹⁶ Nincic, "Maritime Piracy in Africa: The humanitarian dimension."

transit between the Middle East, Europe, and Asia, ¹⁷ as well as some of the foreign fishing vessels present in large numbers in the Indian Ocean. ¹⁸

The fight right now consists of deterrent patrols at sea by warships from more than 20 nations¹⁹ and a push for stability within Somalia through a strong central government.²⁰ The large amounts of financial, material, and diplomatic resources being thrown at the problem are indicative of the attention piracy in the HOA is receiving from the international community. There have been five UN Security Council Resolutions (UNSCR) on piracy;²¹ there are more than 6,000 foreign troops in Mogadishu with an international mandate to support the TFG;²² and at any given time, there are at least 15 warships patrolling off the Somali coast in an unprecedented collaborative effort among various countries including Russia, China, India, the U.S., and members of the EU.²³

At sea the fight against piracy is greatly constrained by the lack of adequate deterrent measures. The risks are still too low, and the profit is still too high for the pirates to opt out unilaterally.²⁴ When an attack is foiled by a patrolling warship, the pirates just back off and wait for a softer target. Even when they are captured, the pirates are usually released soon afterward due to lack of sufficient evidence, or the lack of an

^{17 &}quot;2009 Annual IMB Piracy Report."

¹⁸ Andrew Mwangura, "Workshop on Fishing Communities and sustainable Developments in Southern and Eastern Africa: A small-scale fisheries perspective," *Seafarers' Assistance Program*, March 2006, http://www.icsf.net/icsf2006/jspFiles/eastAfrica/pdfs/IUU%20fishing/esaandrewiuu.pdf.PDF (accessed July 12, 2010).

¹⁹ Stephanie Hanson, "Combating Maritime Piracy," *Council on Foreign Relations*, updated January 7, 2010, http://www.cfr.org/publication/18376/combating maritime piracy.html (accessed February 11, 2010).

²⁰ Ken Menkhaus, "Somalia: Too Big a Problem to Fail?" *Foreign Policy*, August 6, 2009, http://www.foreignpolicy.com/articles/2009/08/06/somalia too big a problem to fail?page=0,1 (accessed February 20, 2010).

²¹ Shani Ross and Joshua Ben-David, "Somali Piracy: An Escalating Security Dilemma," *International Institute for Counter-Terrorism*, August 20, 2009, http://www.ict.org.il/Articles/tabid/66/Articlsid/745/currentpage/1/Default.aspx (accessed January 24, 2010).

²² Ross and Ben-David, "Somali Piracy: An Escalating Security Dilemma."

²³ Ibid.

²⁴ Hansen, "Piracy in the greater Gulf of Aden."

adequate legal framework in many countries.²⁵ The U.S. and some European countries have signed agreements with Kenya to prosecute and imprison convicted pirates there,²⁶ but the system is plagued by many weaknesses, notably legal competency and jurisdictional issues based on the nationalities of the skipper, the vessel, the crew members, the owner of the vessel, and the arresting authority.²⁷ Also, the presence of many warships and the institution of an Internationally Recommended Transit Corridor (IRTC)²⁸ have not been able to prevent pirate attacks. The International Maritime Bureau (IMB) reports that vessels have been taken within this protected corridor since its inception in February 2009.²⁹

Most research on piracy between 2000 and 2005 focused on Southeast Asia because that is where piracy was the most prevalent,³⁰ and thereafter, for the same reason the focus shifted to the HOA. The Strait of Malacca and the Gulf of Aden both lie along the most important route of world trade linking Europe, the Middle East, and Asia.³¹ Disruption of maritime traffic in any of these strategic areas has deep political, economic, and security implications.³² Analyses of the causes of, and the remedies for, modern day piracy have generally focused on these two areas.

At the dawn of this millennium the Strait of Malacca gained the reputation as the most pirate-infested waters of the world, and the sharp rise in piracy there was blamed on the Asian financial crisis of 1997.³³ There is consensus in the literature that economic

²⁵ Abraham Paulos, "Prosecuting Piracy," *Foreign Policy Association*, April 23, 2009, http://www.fpa.org/topics_info2414/topics_info_show.htm?doc_id=893742_(accessed January 24, 2010).

²⁶ Ploch et al., "Piracy off the Horn of Africa," 29.

²⁷ Ploch et al., "Piracy off the Horn of Africa," 29.

²⁸ "Gulf of Aden, Red Sea, and Indian Ocean Transit," *U.S. Department of Transportation*, September 9, 2009, http://www.marad.dot.gov/news-room-landing-page/maritime-advisories/advisory/advisory2009-07.htm (accessed March 2, 2010).

^{29 &}quot;2009 Annual IMB Piracy Report."

³⁰ Ibid.

³¹ James Jay Carafano, Richard Weitz and Martin Edwin Andersen, "Maritime Security: Fighting Piracy in the Gulf of Aden and Beyond," *Heritage special Report*, June 24, 2009, http://www.heritage.org/Research/NationalSecurity/sr0059.cfm (accessed January 24, 2010).

³² Carafano, Weitz and Andersen, "Maritime Security."

³³ David Rosenberg, "The Political Economy of Piracy in the South China Sea," *Naval War College review*, Summer 2009, 62:3, 46.

crisis and political instability combined to drive up the rate of piracy in the late 1990s. The Asian financial crisis put many coastal inhabitants out of work, and young men, with families to care for, had to look for alternative sources of revenue.³⁴ For those with a background in the maritime trade industry or in fisheries, it was natural to look toward the sea for solutions, and when no legitimate ones were forthcoming, piracy seemed the most rational choice.³⁵ Political instability in Indonesia was another major factor in the rise of piracy in Southeast Asia. When piracy there hit record levels in 2003,³⁶ most of the culprits were believed to hail from the troubled Aceh province of Indonesia.³⁷ Political instability, especially when it involves violent conflicts, provides pirates with the opportunity to acquire firearms easily, thus making them more effective at sea.³⁸

However, there is a debate in the literature on Somalia about the relationship between economic decline, instability, and piracy. One camp argues that the collapse of the state in 1991 led to widespread lawlessness on land as well as at sea.³⁹ Vessels from Asia and Europe were increasingly present within Somali waters, engaging in the poaching of maritime resources and the dumping of toxic wastes.⁴⁰ Over-fishing by foreign vessels and the dumping of toxic wastes had the effect of reducing the catch for local fishermen and pushing them out of business.⁴¹ According to most of the local accounts on the causes of piracy, the disenfranchisement of Somali fishermen is seen as

³⁴ Rosenberg, "The Political Economy of Piracy in the South China Sea," 47.

³⁵ Ibid

³⁶ Nincic, "Maritime Piracy in Africa: The humanitarian dimension."

³⁷ Catherine Zara Raymond, "Piracy and Armed Robbery in the Malacca Strait: a Problem Solved?" *Naval War College review*, summer 2009, 62:3, 37.

^{38 &}quot;2009 Annual IMB Piracy Report."

³⁹ Brett Schaeffer, "Piracy: A Symptom of Somalia's Deeper Problems," *The Heritage Foundation*, April 17, 2009, http://www.heritage.org/research/africa/wm2398.cfm (accessed December 12, 2009).

⁴⁰ "There are Two Piracies in Somalia," *African Loft*, April 13, 2009, http://www.africanloft.com (accessed February 27, 2010).

⁴¹ Johann Hari, "You Are Being Lied To About Pirates," *Huffington Post*, January 4, 2009, http://www.huffingtonpost.com/johann-hari/you-are-being-lied-to-abo_b_155147.html (accessed February 19, 2010).

the main reason for the rise in piracy.⁴² This view contends that the fishermen turned to piracy originally as a means of survival,⁴³ but with the success of initial attacks piracy soon developed into the very lucrative business that it is today.⁴⁴ After many years of unheeded complaints all the way up to the United Nations Organization (UN),⁴⁵ the fishermen took up arms—made readily available by the chaos ashore—to chase out the intruders and reclaim their right.⁴⁶ This self-proclaimed "Coast Guard" was the precursor of today's pirate rings in Somalia.⁴⁷

Many others argue that piracy at sea, just like criminal activities on land, is a consequence of state collapse; blaming poachers is simply an excuse that the pirates use to justify what is actually a lucrative criminal enterprise. The pirates are richer than the fishermen ever were, ⁴⁸ and this new trade is continually attracting recruits from communities far inland who have little or no history of fishing. ⁴⁹ This second argument, which discards the role of Somali fishermen, is prevalent and has guided counter-piracy efforts thus far.

Somalia has been without a stable government now for close to two decades, but piracy only became a problem in the last five years.⁵⁰ The fishery industry suffered from the widespread violence ashore after state collapse,⁵¹ but managed to stay viable until

⁴² Katie Stuhldreher, "To turn the tide on piracy in Somalia, bring justice to its fisheries," *Christian Science Monitor*, November 20, 2008, http://www.csmonitor.com/Commentary/Opinion/2008/1120/p09s01-coop.html (accessed February 18, 2010).

⁴³ SteveTomkins, "Fishermen seeking a bigger catch," *Church Times*, July 3, 2009, http://www.churchtimes.co.uk/content.asp?id=77357 (accessed February 19, 2010).

⁴⁴ Mohamed Olad Hassan, "'It's a pirate's life for me'," *British Broadcasting Corporation*, April 22, 2009, http://news.bbc.co.uk/go/pr/fr/-/2/hi/africa/8010061.stm (accessed February 27, 2010).

^{45 &}quot;There are Two Piracies in Somalia," *African Loft*.

^{46 &}quot;There are Two Piracies in Somalia."

⁴⁷ Ibid.

⁴⁸ Raymond Gilpin, "Counting the Cost of Somali Piracy," *United States Institute of Peace*, June 22, 2009, http://www.usip.org/files/resources/1_0.pdf (accessed January 17, 2010).

⁴⁹ Hansen, "Piracy in the greater Gulf of Aden."

⁵⁰ Nincic, "Maritime Piracy in Africa: The humanitarian dimension."

⁵¹ "Fishery Country Profile: The Somali Republic," *Food and Agricultural Organization*, January 2005, http://ftp.fao.org/FI/DOCUMENT/fcp/en/FI CP SO.pdf (accessed February 18, 2010).

2005.⁵² The timing in the decline of fisheries in Somalia and the rise in maritime piracy suggests of a possible link between these two variables. Some have identified the link, but a clear and unequivocal causal relationship has never been established. Whether there is causation or mere correlation between the two, is the gap this thesis intends to fill.

C. RESEARCH QUESTION

Considering that hardship as a result of rapid economic decline within coastal populations has historically been one of the root causes of maritime piracy,⁵³ this study addresses the question of whether the rise in piracy around Somalia was caused by a decline in fisheries production. This question can be answered only by investigating the following:

- Was there a decline in fisheries production?
- If there was a decline, when did it occur?
- If there was a decline, did it coincide with a rise in piracy?
- Were fishermen responsible for the rise in piracy?

D. METHODOLOGY

The process tracing method is used to determine whether the recent upsurge in piracy was caused by Somalia's disenfranchised fishermen. When two events happen simultaneously, it does not mean they are related in any way. Process tracing makes clear whether the two events are related and establishes the nature of their relationship.⁵⁴ It addresses the problem of the timing of events, which is critical if one is to determine whether events happened simultaneously, or close enough in time to possibly influence one another.

The variables for this study are fish production by Somali coastal communities and the level of piracy in the HOA. The International Chamber of Commerce's IMB is a

^{52 &}quot;Fishery Country Profile: The Somali Republic."

⁵³ Bruce A. Elleman, Andrew Forbes and David Rosenberg, "Piracy and Maritime Crime: Historical and Modern Case Studies," *Naval War College Newport Papers*, *35*, January 2010.

⁵⁴ Andrew Bennett and Alexander George, "Process Tracing in Case Study Research," October 19, 1997, http://users.polisci.wisc.edu/kritzer/teaching/ps816/ProcessTracing.htm (accessed March 19, 2010).

trustworthy source of data relating to pirate activity.⁵⁵ It issues regular warnings to mariners about areas with the most recent and frequent pirate attacks. Most importantly, the IMB has a piracy reporting center that collects and analyzes information on pirate acts worldwide, publishing quarterly and annual reports since 1992. Its definition of piracy is considered better suited to today's reality than that contained in the UN Convention on the Law of the Sea (UNCLOS).⁵⁶ The incidents reported by the IMB include all attempted attacks, both successful and unsuccessful. Prior to 1992, the most reliable data on piracy worldwide was published by the Federation of American Scientists (FAS), as "Anti-Shipping Activity Messages" (ASAM).⁵⁷

Measuring economic trends is usually done at a national level through calculations of the GDP. Because this study is concerned only with the plight of coastal fishermen, trends in fish production by the artisanal sector should provide a good indication of their economic status. The quantity and quality of fish production by both the artisanal and industrial sectors were well documented by the Somali Ministry of Fisheries and Marine Resources (MFMR), but after the collapse of the state, data on fisheries became generally unreliable. After 1991, the Food and Agricultural Organization (FAO) continued to provide yearly estimates of Somali fish production until 2005. This study relies on FAO estimates, when they are available, and complements these with qualitative assessments provided by articles and reports, especially for the period after 2005.

E. ORGANIZATION OF THE STUDY

This thesis analyzes piracy and fisheries in Somalia at different time periods to see whether there is a relationship between the two variables, and to establish exactly when such a relationship began. The first time frame, discussed in Chapter II, covers the period from independence in 1960 to state collapse in 1991. Chapter III looks at the

⁵⁵ ICC Commercial Crime Services http://www.icc-ccs.org.

⁵⁶ Hansen, "Piracy in the greater Gulf of Aden," 6. See also, Elleman et al., "Piracy and Maritime Crime," 11.

⁵⁷ FAS produced yearly ASAM reports between 1985 and 1999. Federation of American Scientists, http://www.fas.org/irp/world/para/pirates.htm.

effects of state collapse on piracy and fisheries, while Chapter IV follows with an analysis of the effects of the December 2004 tsunami. Each of these chapters offers a unique context for understanding challenges to fishermen in particular, and coastal dwellers in general. Chapter V summarizes the findings of this study and concludes with recommendations on how to reverse the rising trend of piracy in the HOA even within the current context of statelessness in Somalia.

II. SOMALIA: FISHERIES AND PIRACY BEFORE 1991

A. INTRODUCTION

Somalia's fishermen are blamed by many for the piracy epidemic currently plaguing the HOA.⁵⁸ The argument is that these fishermen resorted to piracy because they could no longer depend on their basic source of livelihood, for a variety of reasons: the collapse of the state in 1991, the 2004 tsunami, unfair competition from foreign vessels, and the dumping of toxic wastes.⁵⁹ This chapter focuses on the three decades between independence in 1960 and the collapse of the state in 1991. It looks at the development of the fisheries sector in Somalia as well as the frequency of pirate activities around the HOA, and investigates whether trends during this early period suggest a relationship between the two. These early trends will also be useful in later chapters to trace the evolution of both phenomena in order to ascertain or refute the purported inverse relationship between them.

B. FISHERIES IN SOMALIA PRIOR TO STATE COLLAPSE

Somalia got its independence from Italy and Britain in 1960, and, like many other African countries, it set about the task of developing its institutions and a national economic base. With practically no mineral resources, the young Somali economy was highly dependent on livestock and agricultural produce.⁶⁰ The overall trend in the fishery sector was one of steady growth, supported by government policy and foreign assistance,

⁵⁸ This argument, used by pirates to gain legitimacy within their local communities, is made in many articles including: Ishaan Tharoor, "How Somalia's Fishermen Became Pirates," *TIME*, April 18, 2009, http://www.time.com/time/world/article/0,8599,1892376,00.html (accessed January 8, 2010). See also Mohamed Abshir Waldo, "Somali piracy: the other side of the coin," *African Prospects*, October 2009, http://www.exacteditions.com/exact/browse/576/929/5847/2/9/0/ (accessed through the Naval Postgraduate School Library January 10, 2010).

⁵⁹ Though the tsunami is not directly cited as a cause of the rise in piracy, it had a devastating effect on coastal fishing communities. "The State of the Environment in Somalia," *United Nations Environment Programme* (2005), 4, 47. http://www.unep.org/depi/programmes/Somalia Final.pdf (accessed December 5, 2009).

^{60 &}quot;The State of the Environment in Somalia," 17.

notably from the former Union of Soviet Socialist Republics (USSR).⁶¹ Somalia has inland waters (rivers and lakes) that present opportunities for freshwater fishing and provide subsistence to certain communities,⁶² but attention here will be exclusively on marine fisheries along the 3,300-kilometer coastline since only the saltwater fishermen and coastal communities are relevant to this study. Whenever possible, a further distinction will be made between the small artisanal fishermen and those who fish on an industrial scale. These two groups have a lot in common, but they have different needs and are impacted unevenly by external factors, including government policies and available technologies.

1. The Artisanal Sector

At independence, fishing in Somalia was entirely artisanal, with the main platform being the *houri*, a small canoe that can be propelled manually with paddles or fitted with a low powered outboard engine.⁶³ The artisanal fleet was later augmented by stronger, locally-constructed, glass-reinforced plastic (GRP) boats, especially through government donations in the mid-1970s. By 1991, the artisanal fleet included about 3,000 boats and *houris* spread across 50 fishing villages along the coast from Kenya to Djibouti.⁶⁴ The catch was limited by the fact that the boats in use were unsafe to deploy more than a few miles from shore, and lacked the logistical capability to remain at sea for an extended period of time.⁶⁵ The artisanal fishermen did not bring in much, but their catch was more than enough to satisfy local demand. There was always a sizeable surplus of fish owing to the Somalis' natural preference for other types of meat as their source of protein, and this surplus was processed and exported principally to countries in East

⁶¹ There was a strong Soviet influence in the politics and economy of Somalia, especially in the early years prior to and after independence. I. M. Lewis, *A Modern History of the Somali* (Athens, Ohio: Ohio University Press, 2002).

^{62 &}quot;The State of the Environment in Somalia." 45.

^{63 &}quot;Fishery Country Profile: The Somali Republic."

⁶⁴ Ibid.

⁶⁵ Sharon Billings, "U.S. Exporters and Investors Have an Opportunity To Help Somalia Develop Its Fisheries Industry," *Business America*, September 25, 1989, http://findarticles.com/p/articles/mi_m1052/is_n19_v110/ai_7955623/pg_3/?tag=content;col1 (accessed March 4, 2010).

Africa, Europe, and the Middle East.⁶⁶ Despite early reports attesting to the richness of Somali waters in fish and its huge economic potential,⁶⁷ the fisheries sector remained mostly artisanal and underdeveloped until the drought of 1973 to 1975.⁶⁸

The drought had a devastating effect on the agricultural and pastoral communities, but also highlighted the potential of the fisheries sector as a sustainable source of subsistence for a sizeable portion of the population, as well as a pillar of the national economy.⁶⁹ Ethnic Somalis traditionally shun fisheries, and this activity was exclusively practiced by the Bajuni and Amarani tribes of non-Somali origin prior to the drought.⁷⁰ Beginning in 1975 the Somali government, through its Coastal Development Project, resettled along the coast thousands of nomads who had lost their livelihood,⁷¹ and supplied five hundred motorized boats to the newly converted fishermen.⁷² The resettlement program increased the number of artisanal fishermen from less than 5,000 to about 20,000 by 1980.⁷³ This had the effect of increasing artisanal fish production from 4,000 tons in 1974 to about 12,000 tons in 1986.⁷⁴

^{66 &}quot;Fishery Country Profile: The Somali Republic."

⁶⁷ Experts of the UN Food and Agricultural Organization conducted many field studies between the late 1960s and early 1980s, and found that Somali waters could sustain an annual fish production of about 200, 000 tons. www.fao.org.

^{68 &}quot;The State of the Environment in Somalia." 18.

⁶⁹ Billings, "U.S. Exporters and Investors Have an Opportunity To Help Somalia."

^{70 &}quot;Somalia: Riverine and Coastal People of Non-Somali Origin," *The Library of Congress country studies*. http://www.photius.com/countries/somalia/society/somalia_society_riverine_and_coastal~1597.html

⁽accessed July 14, 2010).

⁷¹ N. P. Van Zalinge, "Summary of fisheries and resources information for Somalia," *UN Food and Agricultural Organization* (n.d.), http://www.fao.org/docrep/field/303859/3038590b.htm (accessed May 16, 2010).

^{72 &}quot;Fishery Country Profile: The Somali Republic."

⁷³ Mohamed Yassin, "Somali Fisheries Development and Management," *Somaliland CyberSpace*, June 1981, http://www.mbali.info/doc278.htm (accessed July 16, 2010).

⁷⁴ Van Zalinge, "Summary of fisheries and resources information for Somalia."

2. The Industrial Sector

The birth of industrial fishing was another consequence of increased government effort after the drought. A 1974 joint venture between the Somali state and the USSR created SOMALFISH, which operated 10 fishing trawlers in the rich, vast, and underexploited waters of Somalia.⁷⁵ This joint venture, despite its positive impact on overall fish production, was summarily terminated in late 1977 when war between Somalia and Ethiopia forced the USSR to choose one client over the other, and it chose Ethiopia.⁷⁶ The consequences were immediate. Industrial fish production, which had grown from 2,030 tons in 1974 to 4,550 tons in 1977, dropped to a meager 250 tons in 1978.⁷⁷ SOMITFISH, a 1981 joint venture with an Italian company was productive for only two years before all three of its vessels broke down.⁷⁸ In 1983 the Italian government donated five fishing trawlers to the Somali parastatal SHIFCO in another joint venture. This proved to be more durable than SOMITFISH, staying operational long after 1991.⁷⁹ During these tumultuous years the industrial fishing sector stayed afloat thanks to privately owned vessels from Japan, Italy, Singapore, Greece, and Egypt.⁸⁰ These foreign vessels obtained fishing licenses from the MFMR, which regulated their activities within Somalia's Economic Exclusive Zone (EEZ), and collected data on their catch even though none of it was destined for local consumption.⁸¹ SHIFCO and licensed foreign vessels enabled unprecedented growth in industrial fishing in the late 1980s and early 1990s. The industrial sector, which was nonexistent prior to 1974, grew to account for more than 50 percent of the overall catch by 1987.

⁷⁵ Billings, "U.S. Exporters and Investors Have an Opportunity To Help Somalia."

⁷⁶ "Somali Fishing Industry Has Potential For Growth," National Oceanic and Atmospheric Administration, 1982, http://spo.nmfs.noaa.gov/mfr4412/mfr44124.pdf (accessed November 4, 2009).

⁷⁷ Van Zalinge, "Summary of fisheries and resources information for Somalia."

⁷⁸ Ibid.

⁷⁹ SHIFCO is an acronym for the Somali High Seas Fishing Company. SHIFCO's vessels continued to operate within Somali waters long after the collapse of the state, though their earnings no longer benefitted the Somalis. "Final Mission Report Somalia – SHIFCO," (November 18, 1998), http://ec.europa.eu/food/fs/inspections/vi/reports/somalia/vi_rep_soma_1522-1998_en.pdf (accessed May 10, 2010).

^{80 &}quot;Fishery Country Profile: The Somali Republic."

⁸¹ Van Zalinge, "Summary of fisheries and resources information for Somalia."

3. Trends in Fisheries Production

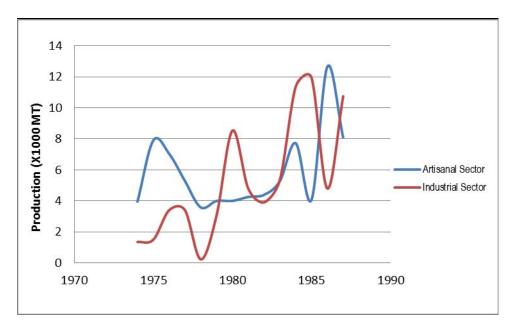


Figure 1. Marine Fish Production by the different sectors in Somalia, 1974–1987. 82

Annual marine fish production (artisanal and industrial combined) went from just under 6,000 tons in 1974 to almost 24,000 tons in 1991.⁸³ Exports rose faster than production, more than 450 percent during the 1980s alone, yielding about \$15 million in 1990.⁸⁴

⁸² This graph is constructed based on statistics from the Somali Ministry of Fisheries and Marine Resources. Van Zalinge, "Summary of fisheries and resources information for Somalia."

^{83 &}quot;Fisheries and Aquaculture Country Profiles – Somalia," Food and Agricultural Organization (last updated 2005). http://www.fao.org/fishery/countrysector/FI-CP_SO/3/en (accessed February 18, 2010).

⁸⁴This figure is almost twice the growth rate for the rest of the world. "Coastal and Marine Ecosystems – Somalia," *Earthtrends* (2003). http://earthtrends.wri.org/pdf_library/country_profiles/coa_cou_706.pdf (accessed December 4, 2009).

1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
4,500	4,500	4,500	4,500	4,500	4,600	4,600	4,700	5,000	5,000	5,600
1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
5,700	5,800	5,900	5,980	10,350	8,268	9,830	8,384	10,984	14,330	9,523
1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
8,730	11,195	19,639	16,467	16,500	18,600	19,827	21,046	22,295	23,500	25,500

Table 1. Somalia—Total annual marine fish capture: 1960–1992 (measured in metric tons). 85

The observed increase in fish production from both the artisanal and industrial sectors was facilitated by the growth of supporting infrastructure. Conservation improved from the mid-1970s with the construction of cold rooms, sponsored by foreign aid, in all the main fishing centers. Ref Distribution too became easier through cooperatives, created in the aftermath of the 1973 to 1975 drought and regulated by the MFMR. A detailed 1988 FAO report shows a well-developed fisheries sector comprising twenty-nine cooperatives involved in the capture, conservation, and distribution of fish products. Ref Locals also set up companies for the construction and repair of the small boats employed by the artisanal fishermen. By the mid 1980s the fishery sector employed about 30,000 full-time and 60,000 part-time workers at various stages of fish production, which represented 10 percent of the coastal population and 2 percent of the entire Somali work force.

⁸⁵ Table constructed using software from the Food and Agricultural Organization: *Fish Stat Plus* at www.fao.org.

^{86 &}quot;Somali Fishing Industry Has Potential For Growth." See also A. I. Bihi, "Somalia National Report," *UNEP Regional Seas Reports and Studies*, No. 51 (1984), 6, 10. http://www.unep.org/regionalseas/publications/reports/RSRS/pdfs/rsrs051.pdf (accessed July 14, 2010).

⁸⁷ Yassin, "Somali Fisheries Development and Management."

⁸⁸ Van Zalinge, "Summary of fisheries and resources information for Somalia."

⁸⁹ Fishery Country Profile: The Somali Republic."

⁹⁰ Ibid., See also Bihi, "Somalia National Report," 3.

Despite the big strides forward, Somalia's abundant marine life remained largely unexploited in 1991. 91 By 1982, the fishing sector had received foreign aid in excess of \$22 million,⁹² mostly in the form of storage and processing infrastructure, but production and exports were still quite low, accounting for only 1 percent of GDP.⁹³ The central government had taken measures to boost fisheries, but they were not enough to enable the potential for exponential growth. The government, through fishermen's cooperatives, regulated the artisanal sector, from harvesting to marketing, but had done little more to improve production since it provided 500 motorized boats in the mid-1970s. By comparison, government assistance, through the creation of the Livestock Development Agency in 1965–66, enabled the livestock sector to grow rapidly and overtake banana as the principal export commodity.⁹⁴ By 1981, livestock accounted for about 90 percent of Somalia's total exports.⁹⁵ Although livestock later declined to only 65 percent of all exports by 1990, it still remained the mainstay of the Somali economy. The low level of government efforts and the lack of national interest in fisheries could be blamed on a culture largely dominated by pastoral nomads who consumed little or no fish and generally considered fishermen to be second-class citizens.⁹⁶ Lastly, the socialist nature of the Siad Barre regime meant that it kept a tight control over all economic activities. Notwithstanding Somalis' aversion to fish, there was probably no room for private initiatives, which otherwise could have greatly benefitted the fisheries sector.⁹⁷

^{91 &}quot;Somali Fishing Industry Has Potential For Growth."

⁹² Ibid.

⁹³ Billings, "U.S. Exporters and Investors Have an Opportunity To Help Somalia."

^{94 &}quot;Somalia – The Economy," *The Library of Congress* (n. d.), http://www.mongabay.com/reference/country_studies/somalia/ECONOMY.html (accessed October 21m 2010).

⁹⁵ Yassin, "Somali Fisheries Development and Management."

⁹⁶ Ken Menkhaus, "Dangerous Waters," *Survival*, 51:1, 21–5, http://www.informaworld.com/smpp/content~content=a908599137~db=all~order=page (accessed May 7, 2010).

⁹⁷ The next chapter supports this assertion by showing how fisheries flourished through private enterprises, in certain areas, after state collapse. The strangling effects of Siad Barre's economic policies are discussed in this article, William Reno, "Somalia and Survival in the Shadow of the Global Economy," *Somaliland Cyberspace*, February 2003, http://www.mbali.info/doc129.htm (accessed July 26, 2010).

C. MARITIME PIRACY IN SOMALIA PRIOR TO STATE COLLAPSE

Piracy has plagued many areas of the world ever since vessels first put to sea. The long Somali coastline was not exempt from this phenomenon prior to 1991, but piracy incidents were neither grave nor frequent enough to catch national or international attention. Worth noting is that the IMB and the International Maritime Organization (IMO) incident reporting procedures did not exist prior to 1991 and it is likely that most pirate acts went unreported.⁹⁸ However, the scanty data available for this period suggest that piracy off the Somali coast was comparatively scarce for an area with such a high volume of maritime traffic.

The Gulf of Aden lies across one of the world's busiest maritime trade routes linking Europe and the Middle East to Asia. An estimated 40,000 vessels of all types transit through it every year,⁹⁹ and yet piracy incidents there during this period were far fewer than in South East Asia, which has a similarly high volume of traffic. The comparison is even more striking with the West African coast that saw far less traffic, but a significantly higher incidence of piracy during the same period.¹⁰⁰

Unfortunately, there are no reliable data for the 1960s or 1970s. By far the most comprehensive documentation of pirate activities in the early 1980s is that compiled by Roger Villar. Of the 400 incidents recorded worldwide between 1980 and 1984, none occurred in East Africa. IMO statistics for the late 1980s and early 1990s closely match the more detailed data from Anti-Shipping Activity Messages (ASAM) compiled by FAS, beginning with 1985. ASAM data show that acts of piracy in the region were

⁹⁸ Roger Villar, *Piracy Today: Robbery and Violence at Sea since 1980* (London: Conway Maritime Press, 1985), 10.

⁹⁹ Poten & Partners, "Pirates Threaten Ship Traffic In Gulf of Aden," *LNG in World Markets*, 2008, http://www.poten.com/search.aspx?query=pirates%20threaten%20ship%20traffic%20in%20gulf%20of%20aden (accessed October 4, 2010).

^{100 &}quot;Report on Acts of Piracy and Armed Robbery against Ships; MSC Circular 785," International Maritime Organization, March 17, 1997.

¹⁰¹ Villar, Piracy Today.

¹⁰² Ibid.

¹⁰³ Federation of American Scientists, Intelligence Resource Program, http://www.fas.org/irp/world/para/pirates.htm.

extremely rare. Indeed, no attacks were recorded in any year except 1989 (4) and 1991 (2). Four of the six attacks were by an organized rebel group, the Somali National Movement (SNM), vying for power ashore. In the SNM attack of December 11, 1989, the Italian commercial vessel *Kwanda* was captured and emptied of its 350 tons of fuel and food reserves. Aside from these politically motivated incidents, two more were recorded, both involving attacks by unidentified armed men in gunboats against commercial vessels. In one of these two cases three crew members were killed by the attackers and their surviving colleagues were forced to jump overboard. In the other, the attack was unsuccessful due to the commercial vessel's effective defensive measures. All six recorded acts of piracy occurred at a time of heightened political tensions ashore and included the use of firearms.

Other regions of the world with higher incidences of piracy (e.g., Southeast Asia, West Africa) never saw such widespread and systematic use of firearms in pirate attacks. ¹⁰⁷ The possession of weapons, apart from offering personal protection, has always been a status symbol within the Somali society. ¹⁰⁸ Furthermore, Somalia's porous borders with Ethiopia and Kenya, coupled with years of instability preceding the collapse of the Siad Barre regime made it easy even for non-militiamen to acquire weapons. ¹⁰⁹ So, the unidentified armed men who carried out the two attacks—those not attributed to the SNM—could very well have been criminals taking advantage of the chaotic situation to make a profit, or members of any of the insurgent groups looking for personal gain. Firearms were not as readily available to coastal populations in Southeast Asia at the

^{104 &}quot;1990 ASAM Report," http://www.fas.org/irp/world/para/docs/ASAM-1990.htm (accessed May 20, 2010).

¹⁰⁵ Ibid.

¹⁰⁶ Ibid.

¹⁰⁷ In other regions machetes and knives were the weapons of choice; firearms were rarely used. Many of the recorded incidents were acts of robbery in which the intruders sought to avoid detection by, or confrontation with the crew. See Villar, *Piracy Today*.

¹⁰⁸ Francis Edukon Emathe, "Somalia: IGAD's Attempt to Restore Somalia's Transitional Federal Government," *Naval Postgraduate School, December 2006*, 9-10, http://www.dtic.mil/cgibin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA462459 (accessed October 10, 2010).

¹⁰⁹ For a detailed account of the political tensions within Somalia that led to Siad Barre's overthrow, see Lewis, *A Modern History of the Somali*, 231–63.

time, and the success rate of pirate attacks there was lower. The use of firearms in Somalia gave pirates an overwhelming advantage over civilian vessels, and this aspect would contribute in later years to unparalleled growth in Somali-based piracy.

D. ANALYSIS AND CONCLUSION

Somali piracy was virtually nonexistent prior to 1989, and remained low through 1991. However, fisheries were in perpetual transformation from 1975, heavily influenced by government policies, available technology, as well as environmental and social factors. At the time of state collapse ethnic Somalis outnumbered the Bajuni and Amarani fishermen and were the main actors in a profession they had shunned for centuries. There is no correlation, however, between the state of fisheries and the level of piracy in this period (Figure 2). When fisheries production declined in the early 1980s, one might have expected to see a rise in piracy, but this did not happen. Instead, the first acts of piracy occurred at a time when fisheries production was growing steadily.

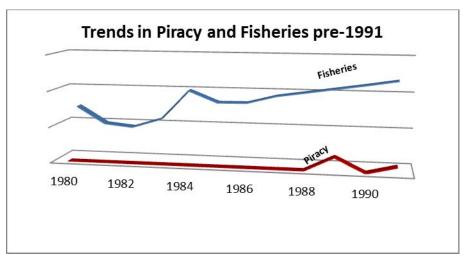


Figure 2. Piracy and Fisheries in Somalia, 1980–1991. 110

The argument that a decline in fisheries leads to a rise in piracy does not seem to apply here. The fact that there was no piracy reported before 1989 suggests that it would take more than a decline in fisheries to start piracy, and that the other necessary

¹¹⁰ The diagram is not drawn to scale, but it illustrates clearly the evolutionary patterns of piracy and fisheries before the collapse of the state.

conditions did not exist in the early 1980s. The onset of piracy, instead, seems to have required a rebellion. Though the SNM's objectives were political in nature, its activities at sea showed how the possession and deployment of firearms could be used for profit against commercial shipping.

The trends in Figure 2 do not suggest an inverse relationship, and there is no evidence of fishermen participating in the few acts of piracy that did occur in 1989 and 1991, these being undertaken exclusively by armed rebels, either on behalf of an insurgent movement or for their own benefit. The attack on the *Kwanda* took place off the port of Zeila, also known as Saylac, near the border with Djibouti, around which there were no big fishing communities at the time.¹¹¹ Other attacks, including the one in which crewmembers were killed, occurred around Cape Guardafui where there existed many fishing villages, but the attacks were all launched from gunboats, and there was no evidence of fishermen involvement.¹¹²

Despite firearms being identified as an important characteristic of Somali-based piracy, it is important to note that piracy managed to grow elsewhere (in Southeast Asia and West Africa) without them. The next chapter looks at the evolution of piracy and fisheries within the unique conditions of statelessness in Somalia.

¹¹¹ The FAO report by Van Zalinge shows a list of the important fishing communities (P.4) and their locations on the Somali coast (P.7). http://www.fao.org/fi/oldsite/FCP/en/SOM/profile.htm.

^{112 1989-91} ASAM Reports.

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III. SOMALIA: PIRACY AND FISHERIES AFTER STATE COLLAPSE 1991–2004

A. INTRODUCTION

President Siad Barre fled Somalia in January 1991, and by the end of that year all state institutions had collapsed. The different rebel factions could not agree on a power sharing deal, and none was strong enough to assume complete control of the country. 113 To the north, the Isaq-dominated entity of Somaliland broke away and declared its independence in May 1991, while in the rest of the country widespread violence and famine combined to produce one of the worst humanitarian crises in the world. Hordes of refugees poured into neighboring countries and many of those trapped within Somalia were dying of starvation.¹¹⁴ The international community, through the UN and several Non-Governmental Organizations (NGOs), decided to send in humanitarian aid, but the convoys of food and medical supplies soon became targets for the rebels. A U.S.-led UN force was then sent in with a humanitarian mandate to protect the distribution of aid, but this force got embroiled in the factional violence leading up to the incidents of October 1993 when 18 U.S. servicemen were killed. 115 A swift withdrawal by U.S. forces followed and the last UN contingent left Somalia in early 1995. The premature termination of the international intervention left Somalia in total desolation and at the mercy of warlords.

The collapse of the state in 1991, and the continued absence of a central government thereafter, has had a tremendous impact on various aspects of life in Somalia. This chapter explores the evolution of piracy and fisheries in Somalia between 1991 and 2004 to see whether there is a correlation between the two. The break in 2004 is prompted by the fact that in December of that year a tsunami originating off the island of

¹¹³ Lewis, A Modern History of the Somali, 262-5.

¹¹⁴ Lewis, *A Modern History of the Somali*. As many as 300,000 Somalis died from starvation before the arrival of foreign aid.

¹¹⁵ Mark Bowden, "Black Hawk Down," *The Philadelphia Enquirer*, November 16, 1997, http://inquirer.philly.com/packages/somalia/nov16/rang16.asp (accessed July 20, 2010).

Sumatra reached villages along the Somali coast, and its effects on fisheries and piracy will be investigated separately in the next chapter.

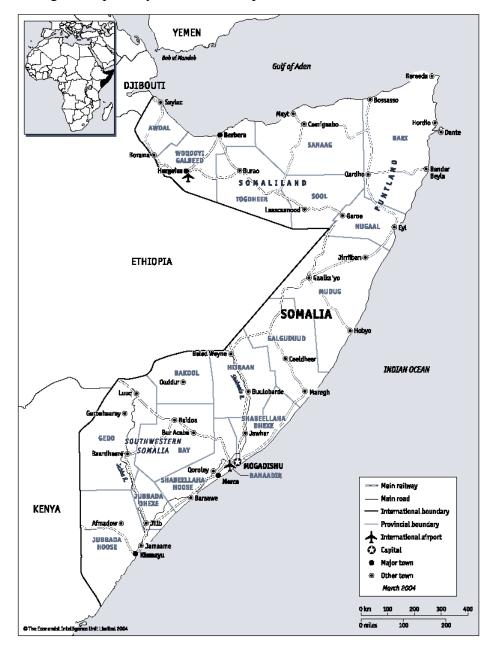


Figure 3. Map of Somalia—March 2004. 116

¹¹⁶ There are contested borders between Somaliland and Puntland to the north, and also between Somalia and Ethiopia to the Southwest. Map Copied from Florian Bruyas, "Somaliland – Puntland State of Somalia," *UN Habitat*, http://www.unhabitat.org/downloads/docs/4417_21585_somaliland.pdf (accessed October 27, 2010).

B. FISHERIES IN SOMALIA: 1991–2004

1. Foreign Aid

A big challenge posed by the collapse of government institutions was the channeling of foreign aid. Somalia had always been highly dependent on foreign aid, which generated \$2.8 billion between 1972 and 1989, and from which it pulled 90 percent of its investment budget.¹¹⁷ This made it the biggest beneficiary of foreign aid per capita in Africa and only second after Israel in the world.¹¹⁸ By 1982, foreign aid to Somali fisheries alone had exceeded \$22 million and several international agencies were working on different projects with the government to improve the fisheries sector.¹¹⁹ Although most of the money from foreign aid channeled through the government was not reaching the target population,¹²⁰ so that the demise of the state was not a big loss in that regard, the fisheries sector was benefitting from direct investment from foreign agencies in the form of infrastructure and equipment donations.

Most international aid agencies left Somalia as a result of the insecurity that prevailed, especially after the departure of UN forces in 1995. Only the EU continued to carry out assistance projects, but it limited its activities to those areas with relative security and some form of local community governance. Between 1991 and 1995 international agencies and local NGOs were mainly focused on providing basic necessities like food, water, and medical supplies to vulnerable populations caught up in the fighting. Many coastal fishing communities were left wanting, mainly due to their

¹¹⁷ Reno, "Somalia and Survival in the Shadow of the Global Economy."

¹¹⁸ Ken Menkhaus, "U.S. Foreign Assistance Somalia: Phoenix from the Ashes?" *Middle East Policy*, 5, 1, 1997, 124.

^{119 &}quot;Somali Fishing Industry Has Potential For Growth," National Oceanic and Atmospheric Administration.

¹²⁰ Peter Leeson, "Better Off Stateless: Somalia Before and After Government Collapse," 2006, http://www.peterleeson.com/Better Off Stateless.pdf (accessed July 25, 2010). This report studied 18 different indicators to show that certain aspects of life in Somalia had improved far above their 1991 levels.

¹²¹ Lewis, A Modern History of the Somali, 282.

inaccessibility, even though they were among the hardest hit.¹²² The EU, by far the biggest contributor of aid to Somalia, was financing projects worth about \$105 million in 2001, but only \$887,000 of that total benefited the fisheries sector.¹²³ This was quite a drop from the \$22 million spent on fisheries in the early 1980s.

2. Support Infrastructure

Another way in which state collapse impacted Somali fisheries was the near complete destruction of land-based support infrastructure. 124 Cold rooms, fish processing centers, and boat construction and repair units were either destroyed or their equipment was stolen. Conservation deteriorated and this reduced the fishing communities' capacity for foreign trade. Whereas Somali fish products had been exported as far as Asia and Europe prior to 1991, the postwar market was limited to Dubai (United Arab Emirates) and neighboring Kenya, where traders could guarantee same day delivery. 125 The absence of conservation facilities also meant that post-catch losses were extremely high—about 50 percent overall, and up to 71 percent for captured sharks. 126 This precarious market situation made the fishermen more desperate to sell and the traders (middlemen) less willing to pay a fair price—giving excessive power to the latter in the

^{122 &}quot;Human Development Report 1998 – Somalia," *United Nations Development Programme*, 29, 43, http://hdr.undp.org/en/reports/nationalreports/arabstates/somalia/nhdr 1998 somalia-en.pdf (accessed July 20, 2010). In the north, entire fishing communities were ransacked and emptied of their inhabitants who fled to Ethiopia during the civil war years, 1988-1991. "Somaliland in Figures," *The World Bank*, 2004, http://siteresources.worldbank.org/INTSOMALIA/Resources/somaliland in figures 04.pdf (accessed August 4, 2010).

^{123 &}quot;European Commission Strategy for the Implementation of Special Aid to Somalia: 2002 – 2007," *European Commission*, 2001, http://ec.europa.eu/development/icenter/repository/print_so_csp_en.pdf (accessed July 29, 2010).

^{124 &}quot;Africa Environmental Outlook: Harvesting of Coastal and Marine Resources in Eastern Africa," *Grid-Arendal*, 2002, http://grida.no/aeo/107.htm (accessed August 4, 2010).

¹²⁵ Abdullahi Mohamed Jimale, "After the Tsunami Fishing Settlements Survey/Somalia Indian Ocean Coastal Towns," *Basic Relief and Rural Development Network*, 2009, http://www.reliefweb.int/rw/rwb.nsf/db900sid/SHIG-7VWF56?OpenDocument&click (accessed July 8, 2010).

¹²⁶ Daahir Mohamed Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia," *Food and Agricultural Organization*, 2005, ftp://ftp.fao.org/FI/DOCUMENT/tsunamis_05/somalia/cons_miss_rep/Burale_jun-aug_05.pdf (accessed May 12, 2010).

commercialization of fishery products.¹²⁷ The artisanal sector was a lot more dependent on land-based infrastructure—cold rooms and processing centers—and therefore suffered more from its destruction.¹²⁸ Mismanagement of resources and lack of external support crippled many of the cooperatives that existed prior to 1991. By 2004, only six cooperative-like structures existed in central and southern Somalia, and they attracted very few fishermen due to their limited ability to provide assistance.¹²⁹ Of all the fishing communities in central and southern Somalia only Mareeg had retained its prewar storage facility. By 2004 some of the other processing facilities had been rehabilitated, but were still too few to overcome the huge conservation problem.¹³⁰

Apart from these collective arrangements, a good number of privately-owned businesses set up shop in the more peaceful areas, like Puntland, to take advantage of the growing lobster and shark export market.¹³¹ Boat construction and repair capacity was completely destroyed in the early 1990s and was never fully re-established afterward, except for wooden boats. This increased costs and extended the time fishermen stayed away from sea, as they had to import spare parts and carry out repairs themselves.

3. **IUU Fishing**

See Chapter II.

State collapse also led to an exponential increase in the number of foreign poachers within Somali waters, and this in turn had a tremendous impact on artisanal fisheries. Illegal, unreported, and unregulated (IUU) fishing poses social, economic, and

^{127 &}quot;Final Report Mid-term Evaluation of the First Rehabilitation Programme (FRP) for Somalia," *European Commission*, 1997, 157, http://ec.europa.eu/europeaid/how/evaluation/evaluation_reports/reports/acp/951327_en.pdf (accessed July

^{20, 2010).128} Industrial fishing vessels had refrigeration units onboard and landed their catches in foreign ports.

¹²⁹ Jimale, "After the Tsunami Fishing Settlements Survey/Somalia Indian Ocean Coastal Towns."

¹³⁰ Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia," 10. By the late 1990s the EU had also financed the rehabilitation of some fishing centers in the North. "Final Report Mid-term Evaluation of the First Rehabilitation Programme (FRP) for Somalia," *European Commission*, 156.

¹³¹ Though the exact number of such businesses is not known, they seem to have been the prevalent economic activity in cities like Garacad, Puntland in 2004. "Somalia after the tsunami," *Science in Africa*, January 2005, http://www.scienceinafrica.co.za/2005/january/somalia.htm (accessed July 18, 2010).

environmental problems, especially in developing countries.¹³² Maintaining a Monitoring, Control, and Surveillance (MCS) capability is quite expensive, and many coastal countries do not recognize its benefits until they suffer the ills of IUU fishing. Somalia had some MCS capability in the form of a navy, but it had not been able to prevent IUU fishing before 1991.¹³³ So the collapse of the state only made this existing problem much worse, even though the effects of IUU fishing were not felt until after the departure of UN forces from Somalia. 134 Relatively few in number prior to state collapse, the number of IUU vessels off the coast of Puntland alone had risen to about 300 by 1998;135 by 2004 this number was up to 700 for the entire Somali coast, and their total catch was valued at about \$94 million per year. 136 Aside from this huge loss in potential revenue, Somalia suffered from IUU fishing through the depletion of its fish stocks and the degradation of its marine environment.¹³⁷ Moreover, IUU fishing had a significant direct impact on Somalia's fishing communities. Most of the foreign vessels had struck deals with local warlords, or were in possession of fishing licenses from sources that were undoubtedly dubious since Somalia no longer had an official licensing institution.¹³⁸

^{132 &}quot;Review of Impacts of Illegal, Unreported and Unregulated Fishing on Developing Countries," *Marine Resources Assessment Group* (2005), http://webarchive.nationalarchives.gov.uk/+/http://www.dfid.gov.uk/pubs/files/illegal-fishing-mrag-report.pdf (accessed July 19, 2010).

¹³³ IUU fishing's impact on Somalia was insignificant prior to 1991, and its level was comparable to that of neighboring states. Abdirahman Jama Kulmiye, "Militia vs Trawlers: Who is the Villain?" *The East African Magazine*, July 9, 2001, http://www.ecop.info/e-news/e-news-01-07-9.htm (accessed August 1, 2010).

¹³⁴ Warships from a number of countries, notably the U.S., patrolled Somali waters protecting and supporting the delivery of aid between 1992 and 1995. Though U.S. ground forces left Somalia in 1994, U.S. naval vessels continued to support the UN mission. Lester H. Brune, *The United States and Post-Cold War Interventions: Bush and Clinton in Somalia, Haiti and Bosnia 1992 – 1998*, (Claremont, CA: Regina Books, 1998), 33.

¹³⁵ Kulmiye, "Militia vs Trawlers: Who is the Villain?"

^{136 &}quot;Review of Impacts of IUU Fishing on Developing Countries."

^{137 &}quot;The State of the Environment in Somalia," 45.

^{138 &}quot;Report of the Panel of Experts on Somalia pursuant to Security Council resolution 1425 (2002)," *United Nations Organization*, March 25, 2003, 44, http://wwww.reliefweb.int/rw/RWFiles2003.nsf/FilesByRWDocUNIDFileName/ACOS-64CUS8-unsc-som-25mar.pdf (accessed July 20, 2010).

The possession of these documents and the permission of some of the warlords emboldened foreign fishing vessels to venture closer to shore, into areas traditionally reserved for artisanal fishing, and this frequently resulted in clashes with the locals. As early as 1995 there were complaints, channeled up to the UN and other international organizations, by artisanal fishermen of their nets being torn and their boats crushed by bigger foreign fishing vessels, resulting occasionally in the loss of life. As these clashes became more frequent, rival militia groups intervened either on behalf of local fishermen, or to protect those vessels for which their leaders had received levies. The presence of militiamen at sea and the concomitant introduction of weapons made the clashes between foreign vessels and locals more dangerous. Some of the foreign vessels were seized and only released after the payment of ransom, and this pushed many of them to acquire weapons for protection. 141

Some of the artisanal fishermen likewise acquired weapons—readily available in lawless post-1991 Somalia—but they still found it hard to compete with the larger and better equipped IUU vessels. A major consequence of the escalation of violence at sea was that artisanal fishermen were pushed much closer to shore. Artisanal fishing grounds, which were judged to be sparsely occupied and underexploited prior to 1991, were suddenly overcrowded leading to the unsustainable exploitation of certain species. 143

¹³⁹ Mohamed Abshir Waldo, "The Two Piracies in Somalia: Why the World Ignores the Other?" *American Chronicle*, January 7, 2009, http://www.americanchronicle.com/articles/view/87075 (accessed May 8, 2010).

 $^{^{140}}$ "Report of the Panel of Experts on Somalia pursuant to Security Council resolution 1425 (2002)," P44.

^{141 &}quot;Report of the Panel of Experts on Somalia pursuant to Security Council resolution 1474 (2003)," *United Nations Organization*, March 25, 2003, 34, http://wwww.reliefweb.int/rw/RWFiles2003.nsf/FilesByRWDocUNIDFileName/ACOS-64C9YU-unsc-som-04nov.pdf (accessed July 20, 2010).

¹⁴² Andrew Mwangura, "Somalia: Pirates or Protectors?" *Pambazuka News*, May 20, 2010, http://www.pambazuka.org/en/category/features/64575 (accessed May 24, 2010).

^{143 &}quot;Pirates and Profiteers: How Pirate Fishing Fleets are Robbing People and Oceans," *Environmental Justice Foundation*, 2005, 7, http://www.ejfoundation.org/pdf/pirates_and_profiteers.pdf (accessed July 30, 2010).

4. Migration

Overcrowding of artisanal fishing grounds after state collapse was not the result of IUU fishing alone. Migration patterns played a huge role, prompted by security concerns, as well as economic and environmental factors. During the civil war entire fishing villages were deserted in southern Somalia and in the northern districts of present day Somaliland. Many fishermen crossed into Kenya and Ethiopia, while others stayed in Somalia and migrated to fishing communities in more peaceful areas. 145

During this period, agricultural communities were frequently raided and their food stocks confiscated by any of the many factions vying for power in the south. The general insecurity soon brought a halt to farming activities and took away the livelihoods of a sizeable portion of the population. Pastoralists suffered a similar fate. Continual fighting disrupted the movement of cattle, and frequently meant that herdsmen could neither find grazing grounds for their herds, nor have access to the all-important export market. Then, just as the fighting began to die down in many areas, a ban by Saudi Arabia in 1998 on the import of Somali livestock, due to fears of Rift Valley fever, dealt a further blow to the livestock sector. This coincided with a period of severe droughts followed by floods in 1997 and 1998, which wiped out as much as 95 percent of the camel and goat herds in some areas. The cycle of floods, Rift Valley fever, and a ban on livestock exports would be repeated again barely two years later. Many of the affected pastoralists thus turned to fishering, full-time or part-time, to guarantee a source of livelihood.

^{144 &}quot;Somaliland in Figures 2004," 14.

^{145 &}quot;FAO Fishery Country Profile – The Somali Republic," *UN Food and Agricultural Organization*, January 2005, http://www.fao.org/fi/oldsite/FCP/en/SOM/profile.htm (accessed January 10,2010).

^{146 &}quot;Human Development Report 2001 – Somalia," *United Nations Development Programme*, 98, http://hdr.undp.org/en/reports/nationalreports/arabstates/somalia/Somalia_2001_en.pdf (accessed July 20, 2010).

¹⁴⁷ Gonzalo Tello, "Fisheries Tsunami Emergency Programme – Somalia," *UN Food and Agricultural Organization*, October 2005, 9, http://www.fao.org/fi/oldsite/eims-search/1 dett.asp?lang=en&pub_id=198847 (accessed June 2, 2010).

^{148 &}quot;Human Development Report 2001 – Somalia," 98.

¹⁴⁹ Ibid.

The conversion to fishing was made easier by the booming and rewarding lobster export market, especially in Puntland.¹⁵⁰ As calm returned to certain regions, formerly deserted fishing villages were progressively repopulated and some eventually became overpopulated. Separate reports by the FAO, UN Development Program (UNDP), and the World Bank found that the total population engaged in artisanal fisheries in 2004 numbered about 35,000.¹⁵¹ This number is substantially less than the 90,000 estimated for prewar years, but it resulted in a much higher population density considering that artisanal fishermen were confined to a smaller area in 2004 due to fear of violence from clan militias and fundamentalists and avoidance of confrontations with the larger IUU fleet vessels.¹⁵²

Overcrowding of artisanal fishing waters and the consequent over-fishing of certain species, such as lobsters and sharks, led to their depletion. By 2004, average daily catches for lobster had decreased by as much as 90 percent from the preceding decade, and its market was estimated to be very close to collapse. The decline in lobster production, which started around 1997, pushed fishermen to engage in year-round fishing to make up for their losses, and this only intensified the rate of depletion. The

^{150 &}quot;Human Development Report 2001 – Somalia," 98.

¹⁵¹ AN FAO study visited 31 out of 35 fishing villages in central and south Somalia; 4 were inaccessible due to insecurity. The villages visited had a pre-tsunami fishing population of about 21,000 (full time and part time). Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia," 6. Adding to the 21,000 is about 10,000 in Puntland (see "Feasibility Report on the fisheries sector in Puntland," *United Nations Development Program*, April 2005, 11, http://mirror.undp.org/somalia/pdf/Fisheries%20report%20Puntland%20complete.pdf (accessed August 10, 2010)), and 2,600 fishermen counted in Somaliland, "Somaliland in Figures 2004," *The World Bank*, 18.

¹⁵² The 90,000 estimate included both artisanal and industrial sector fishermen, as well as those involved in processing and marketing of fishery products. It also included freshwater fishermen. "FAO Fishery Country Profile – The Somali Republic."

¹⁵³ Tello, "Fisheries Tsunami Emergency Programme – Somalia," 9.

¹⁵⁴ Lobster fishing was normally carried out twice a year, for a total of five months, thus leaving seven months for species to reproduce during the monsoon seasons. P. J. Fielding and B. Q. Mann, "The Somalia Inshore lobster Resource: A Survey of the Lobster Fishery of the North Eastern Region (Puntland) between Foar and Eyl during November 1998," *Somaliland Cyberspace*, June 1999, http://www.mbali.info/doc206.htm (accessed July 24, 2010).

depletion rate for lobster was substantially higher than that of other species, but overall the artisanal catch was still down by about 30 percent from its 1995 value.¹⁵⁵

5. Industrial Sector

The discussion thus far has focused on the artisanal sector, but there had also been a thriving industrial sector prior to state collapse (see Chapter II). However, the industrial sector was so dependent on the state for licensing and joint ventures that it basically fell apart when state institutions collapsed in 1991. Licensed vessels were required to report the quantity and quality of their catch to the MFMR, but they all landed their harvest in foreign ports. Their activities, therefore, were not greatly hampered by the chaos that prevailed ashore in Somalia except that they lost their legitimacy, and, for all practical purposes, became indistinguishable from the hundreds of other IUU vessels in Somali waters. Although the exact fate of these formerly-legitimate vessels is not known, this is irrelevant to this thesis since these vessels employed very few Somalis and did not interact much with coastal communities. The only big loss was the licensing fee these vessels used to pay to the former regime. As discussed above, state investment in fisheries was minimal, so it is safe to say that any additional fees from them would not necessarily have benefitted the fisheries sector. One exception was SHIFCO, a state owned business. In fact, it was the only tentity associated with the Siad Barre regime that stayed standing long after 1991. 156 SHIFCO's five trawlers continued to fly the Somali flag and fish in Somali waters, undertaking regular 45-day expeditions, but their homeport was moved to Aden (Yemen). 157 Following state collapse, the last governmentnominated Chairman and Chief executive Officer of SHIFCO, Farah Munyah,

¹⁵⁵ There are no national fisheries statistics available after 1991 and these figures are estimates based on input from fishermen and local businesses. Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia," 2.

¹⁵⁶ Kulmiye, "Militia vs Trawlers: Who is the Villain?" The East African Magazine.

¹⁵⁷ SHIFCO vessels landed all their catch in Aden before export to Europe and the Middle East. All ship repairs were also carried out in Aden. "Final Mission Report: Somalia – SHIFCO," *European Commission*.

transformed this former para-statal into his privately-run enterprise.¹⁵⁸ There are at least four instances when SHIFCO vessels were captured for ransom by Somali armed men despite, or maybe because of, the fact that they flew the Somali ensign.¹⁵⁹ Since their catches no longer benefitted the Somali people in general, the SHIFCO vessels were probably considered to be part of the loathed IUU fleet.

6. Trends in Fish Production

FAO statistics show that the fisheries sector survived, and even thrived through the 1990s at a time when violence and widespread famine had crippled the mainstays of the national economy, notably agriculture and livestock. Fish production reached an all-time high in 1995, and, even when the sector later struggled, annual production never went below 20,000 tons (see Table 2).

1990	1991	1992	1993	1994	1995	1996	1997
22,295	23,500	25,500	27,500	29,600	27,700	25,800	23,900
1998	1999	2000	2001	2002	2003	2004	2005
22,000	24,500	20,600	27,300	28,800	29,800	29,800	29,800

Table 2. Somalia—Total annual marine fish capture: 1990–2005 (measured in metric tons). ¹⁶¹

However, these figures do not paint a clear picture if one considers the following. First, the collection of fisheries data in Somalia was already problematic before state collapse and became even more so in the chaos that ensued. In a study carried out in the early 1980s both national and international marine statisticians identified some critical

¹⁵⁸ Mr. Munyah is alleged to have bribed Ali Mahdi (Siad Barre's successor in Mogadishu) with \$500,000 for this privilege. "Report of the Panel of Experts on Somalia pursuant to Security Council resolution 1425 (2002)," 14, 18.

¹⁵⁹ Kulmiye, "Militia vs Trawlers: Who is the Villain?"

¹⁶⁰ Fisheries was not the only thriving sector in post-1991 Somalia; telecommunications and remittance network institutions also flourished, and actually grew far above pre-war levels. "Human Development Report 1998 – Somalia."

¹⁶¹ Table constructed using software from the Food and Agricultural Organization: *Fish Stat Plus*, at www.fao.org.

factors that hampered the collection of fisheries data along the coast, including restricted access to landing sites and non-cooperation from many fishermen. Adding to these factors after 1991 was the disappearance of the MFMR—the regulatory body through which the government had controlled artisanal fishing cooperatives, issued licenses for industrial fishing, and collected data on fish production from the artisanal and industrial sectors. Even well-structured agencies of the UN, such as the FAO and the UN Environmental Program (UNEP), had relied to some extent on the Somali government to coordinate their activities on the ground, and typically used statistical inputs from the MFMR to construct their databases.

Second, it is important to note that FAO national fisheries statistics are collected from a variety of sources, such as specialized state institutions, regional fishery organizations, and international trade bodies. The data is then validated through consultations, comparative intelligence, and expert advice. He SHIFCO vessels, for example, reported their catch to the European Commission on a regular basis, and vessels from EU member states reported their catches from Somali waters to the Indian Ocean Tuna Commission (IOTC) at least until 2003. Organizations such as the International Trade Center (ITC) also collected data from countries worldwide on imports and exports of Somali goods. All these data were processed by FAO and adjusted to account for unreported catches.

Thus, annual production figures in Table 3 reflect more than the catch of Somalia's artisanal fishermen. The contribution of artisanal fisheries to the total output is

¹⁶² Other factors cited were, confusion over local nomenclature for the different species, and the lack of qualified personnel in the collection and processing of data. "Seminar for Fisheries Statistics as a Means for Improved Fisheries Management," *Food and Agricultural Organization*, 1983, http://www.fao.org/docrep/field/255089.htm#H1003 (accessed May 3, 2010).

^{163 &}quot;Fisheries statistical collection," *Food and Agricultural Organization*, http://www.fao.org/fishery/statistics/global-capture-production/4/en (accessed January 12, 2010).

^{164 &}quot;Fisheries statistical collection."

^{165 &}quot;Final Mission Report: Somalia – SHIFCO."

^{166 &}quot;Review of Impacts of IUU Fishing on Developing Countries," 166.

¹⁶⁷ ITC has data on Somali fisheries starting in 2001. "Trade Competitiveness Map – Somalia" *International Trade Center*, http://www.trademap.org/countrymap/Product_SelCountry_TS.aspx (accessed August 7, 2010).

critical since the objective here is to evaluate the impact of state collapse on production levels and thus on coastal fishing communities. In the absence of a national fisheries policy after state collapse, it would appear that fisheries evolved unevenly along the Somali coast. In Somaliland, for example, fishing communities were completely depopulated during the years of the civil war, and fish production was close to nil. In 2004 the region counted about 2,600 fishermen, and production was less than 10 percent of its prewar value. Even without exact prewar figures for the number of fishermen and the size of the annual catch per region, it would be accurate to conclude that the growth of fisheries in Somaliland was stunted after 1991. After Somaliland broke away in 1991, the relative peace there enabled its predominantly pastoral population to continue its trade, and the livestock sector remained the main source of revenue for about 65 percent of the population. Unlike those in the war-torn south, pastoral nomads in Somaliland did not feel the need to turn to fishing.

Conversely, in Puntland, artisanal fisheries experienced explosive growth after an initial slump during the civil war years. Production reached a peak of 15,000 metric tons (MT) in 1995—about double the figure in the prewar years ¹⁷⁰—and stabilized at that value for a couple of years before declining to about 11,000 MT in 2004. ¹⁷¹ The relative boom in fisheries in Puntland could be attributed to two factors. First, many more fishermen resettled in Puntland after the war than in Somaliland. ¹⁷² Second, the less rigid administrative structure in Puntland made it easier for Somalis and Middle Eastern traders to establish businesses and deal directly with local fishermen.

Though there are no production figures for central and southern Somalia during this period, complaints by fishermen indicated that there was a decline of more than 70

^{168 &}quot;Somaliland in Figures 2004," 13.

¹⁶⁹ Ibid., 6–8.

¹⁷⁰ Annual production by the artisanal sector pre-1991 fluctuated between 5,000 and 8,000 MT (see Chapter II). Van Zalinge, "Summary of fisheries and resources information for Somalia."

¹⁷¹ Artisanal fish production prior to the tsunami was estimated to be about 11,000 MT, 30% lower than its peak value 10 years earlier. "Feasibility Report on the fisheries sector in Puntland," 11.

^{172 &}quot;Feasibility Report on the fisheries sector in Puntland."

percent in catches between 1995 and 2005.¹⁷³ This rate of decline was about twice that of Puntland, and this may be attributed to the greater number of fishermen and bigger post-catch losses resulting from far less access to export markets due to insecurity.¹⁷⁴ The chart below is constructed based on Puntland statistics alone, but the trend it shows would be similar for central and southern Somalia, except that the decline rate after 1997 would be twice as great. For the purpose of this study, and based on the unavailability of specific production statistics for central and southern Somalia, it is assumed that the chart in Figure 4 is representative of all areas except Somaliland. Somaliland is excluded for two main reasons. Firstly, the number of fishermen there remained low and production rose to only about 10 percent of its prewar value. There was no decline, at least not to a point where it would justify a resort to piracy. Secondly, there was no piracy in Somaliland waters after 1991. The exclusion of Somaliland does not detract from the purpose of this thesis, which aims at comparing piracy and fisheries where both occur.

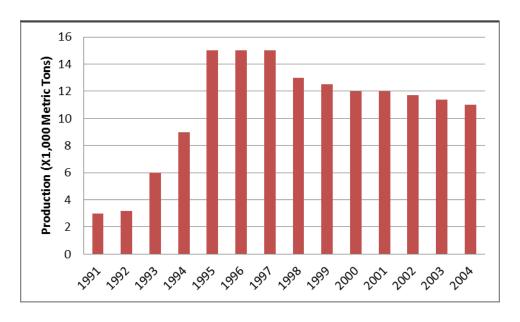


Figure 4. Puntland—Artisanal fish production 1991–2004.

¹⁷³ Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia," 9.174 Ibid.

C. PIRACY IN SOMALIA: 1991–2004

There was a marked increase in pirate activities within Somali waters between 1991 and 2004. Virtually nonexistent in previous decades, piracy off Somalia slowly developed into a permanent, but limited, threat in the 1990s. While the number of attacks stayed relatively low up to 2004, Somali piracy attracted international attention because of the tactics and weapons employed. There was a fair bit of looting, as in other areas, but piracy here distinguished itself mostly by pirates' preference for kidnappings and ransom demands, as well as their systematic use of firearms. These characteristics of Somali piracy were the consequence of the chaos ashore where huge stockpiles of government weapons—accumulated from years of military cooperation with the Soviet Union and later the U.S.—had fallen into the hands of different militia groups. The porous borders with Kenya and especially Ethiopia exacerbated the problem by allowing the influx of small arms from Somalia's unstable neighbors. 175 The IMO and the IMB established piracy tracking mechanisms in the early 1990s that greatly reduced, though did not completely resolve, the issues of under-reporting noted in previous decades. ¹⁷⁶ There were slight differences in the statistics published by these organizations, most likely due to their different definitions of what constitutes piracy, but the trends they revealed were remarkably similar.¹⁷⁷

¹⁷⁵ Lewis, A Modern History of the Somali, 263.

¹⁷⁶ Anti – Shipping Activity Messages (ASAM) reports, which had been the most reliable source of piracy statistics, continued to be issued until 1999, but were less comprehensive than IMO and IMB reports. www.fas.org.

¹⁷⁷ Unlike the IMO, IMB considers attempted attacks occurring within territorial seas as acts of piracy. There are a few other distinctions outlined by Elleman, Forbes and Rosenberg, "Piracy and Maritime Crime," 11.

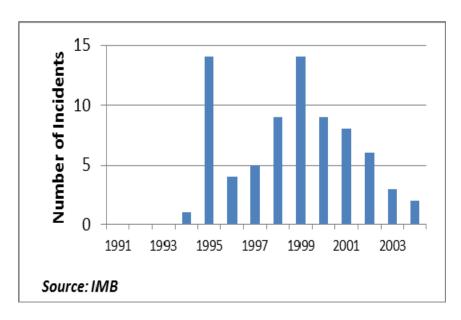


Figure 5. Somalia—Piracy Trends 1991–2004. ¹⁷⁸

The spike in pirate activity noted in 1995 could be due to a number of factors. First, it was in March of that year that UN forces, including a strong naval component, ¹⁷⁹ finally left Somalia. While in Somali waters, the international navies represented a potent deterrent and maritime law enforcement authority. Their departure paved the way for unrestricted sea patrols by different militias empowered by their gains on land, each eager to inherit the authority of the defunct state. ¹⁸⁰ Second, the number of IUU vessels in Somali waters increased considerably immediately after the departure of UN forces, and this period coincides with the first recorded confrontations between IUU vessels and local fishermen. Nonetheless, the various reports show that most of the vessels attacked that

¹⁷⁸ The number of incidents represents the sum of all attempted attacks (both successful and unsuccessful). "IMB Annual Piracy Reports," 1992 – 2004, *ICC International Maritime Bureau*. <u>www.icc-ccs.org</u>.

¹⁷⁹ Brune, The United States and Post-Cold War Interventions, 33.

¹⁸⁰ All the attacked vessels reported that their assailants claimed to be the Somali Coast Guard protecting national resources against foreign illegal exploitation. "1995 Anti – Shipping Activity Messages (ASAM) report," *Federation of American Scientists*, http://www.fas.org/irp/world/para/docs/ASAM-1995.htm (accessed June 6, 2010).

year were not fishing vessels.¹⁸¹ Also, two of the fourteen incidents reported by IMB that year were simply radar sightings of suspicious small boat activity. This does not take away from the fact that 1995 was an important year for piracy off the Somali coast. From then on, piracy was a permanent fixture in Somali waters. The spike in 1995 prompted the IMO and other international maritime agencies to start issuing warnings to mariners to stay as far away from the Somali coast as possible, and advising ships in transit to be alert and adopt evasive maneuvers when approached in the area. Consequently, the number of attacks dropped, but slowly rose again to another peak in 1999. By this time the pirates were better equipped and organized to extend their reach beyond the 12-nautical-mile (NM) range. Whereas the attacks in 1995 had occurred quite close to shore, by 2000 the pirates could reach vessels as far out as 80 NM.¹⁸²

1. Targets and Tactics

From the outset Somali pirates seemed to be indiscriminate in their choice of targets, and this would not change over time. Container ships, bulk carriers, sail boats, fishing vessels, and yachts were all among the victims. Regardless of whether the assailants claimed to be part of a Coast Guard, the end result of a successful boarding was the same: the ship and crew were systematically stripped of goods, personal belongings, and cash. If the conditions were right, the ship was hijacked and kept until ransom was paid by its owners. With respect to tactics, Somali pirates preferred to use force instead of stealth to board vessels. Almost always shots were fired, and occasionally the vessel was damaged or the crew wounded. The pirates' weapons of choice were firearms and Rocket Propelled Grenades (RPGs), which they seemed to possess in great quantities, but they nonetheless aborted attacks when faced with resistance from an alert crew. Some

^{181 &}quot;1995 Anti – Shipping Activity Messages (ASAM) report." Many attacks on IUU vessels went unreported because these vessels did not want to disclose their illegal activities. Ironically, two SHIFCO vessels were among the few fishing vessels attacked that year. Both were hijacked by militiamen and released three weeks later after the payment of \$1 million.

^{182 &}quot;2000 IMB Annual Piracy Report," ICC International Maritime Bureau, January 2001.

¹⁸³ On the west coast of Africa the reverse was true, probably because firearms were not as readily available as they were in Somalia. From Monrovia to Lagos, most attacks occurred in port or at anchorage using less lethal weapons and pirates generally avoided confrontations with the crew. "IMB Annual Piracy Reports," 1992 – 2004; "ASAM Reports," 1991 – 1999."

ships fired back at the pirates or simply mustered the crew and activated their fire hoses, but the most effective defensive measure proved to be speed. Many attacks were averted by vessels simply changing course and increasing their speed to 12 knots.¹⁸⁴

The pirates employed a variety of small crafts, fitted with low horsepower outboard engines that could not keep up with the bigger, faster vessels. Also, boarding maneuvers become extremely hazardous at high speeds, and therefore, risky for pirates to undertake even in those rare instances when they could outpace their victims. The pirates' speed handicap is highlighted in one attack on the Merchant Vessel *Bonsella* in 1994. This vessel was fired upon and then boarded from a dhow, while transporting emergency aid to Somalia. The pirates explained to the crew that the *Bonsella* had been attacked because they, the pirates, needed a faster means to chase IUU fishing vessels in Somali waters. The *Bonsella* was released 6 days later after a couple of unsuccessful attacks on other ships. 185 It, too, was stripped of its cargo and cash.

2. Reorganization: The Business Model

In 2004, more than a decade after state collapse, piracy off Somalia was still far less frequent than in neighboring countries with functioning governments, like Eritrea, Kenya, and Yemen. 186 From a global perspective the occurrence of piracy in East Africa was quite low; only the North Atlantic and the Mediterranean had less piracy. 187 Other than the systematic employment of deadly weapons Somali piracy was considered to be within acceptable levels for a country with such a long coastline. By 2004, however, it was showing signs of getting worse not in terms of frequency of occurrence, but rather in its organization. Piracy had evolved from random attacks at sea by clan-based militia to a fledgling business enterprise transcending clan lines.

¹⁸⁴ "IMB Annual Piracy Reports," 1992–2004; "ASAM Reports," 1991–1999.".

^{185 &}quot;1995 Anti – Shipping Activity Messages (ASAM) report."

¹⁸⁶ Hansen, "Piracy in the Greater Gulf of Aden."

¹⁸⁷ In 2004 and the two decades preceding it piracy in East Africa was consistently lower than in other areas like the South China Sea, the Straits of Malacca, South America and West Africa. "2004 IMO Annual Piracy Report," *International Maritime Organization*, May 5, 2005.

Still dependent on warlords for protection, pirates under the new business model invested in more seaworthy boats, bigger engines, and training, and attracted recruits from different clans. Mohamed Abdi Hassan, a former government employee who started recruitments in 2003 in Harardhere, an area not previously known for its involvement in piracy, is credited with being the pioneer of the business model. He new breed of business-oriented pirates did not claim membership in any Coast Guard, but they nonetheless retained the grievances against IUU fishing, which assured them legitimacy at home. This reorganization set the foundation for rapid growth in piracy by creating a self-sustaining system in which gains from each attack were reinvested to make the next attack more effective.

D. ANALYSIS AND CONCLUSION

This period (1991–2004) established the first direct link between piracy and fisheries. The relationship between these two activities was manifested in two ways. First, the grievances of local fishermen were used by militia groups to carry out acts of piracy for their personal benefit. Second, fishermen themselves picked up weapons and attacked vessels at sea. Prior to 1991, random isolated incidents of piracy were conducted by insurgent groups vying for power ashore. When the Siad Barre regime collapsed, the violence and lawlessness on land eventually spread out to sea, especially after UN forces left Somalia in 1995.

When the quest for political power no longer provided the necessary motives to conduct sea patrols, militia groups took up the plight of local fishermen. They received proceeds from the licensing of foreign vessels, but used none of the funds to protect or develop fishery resources. ¹⁹⁰ Gen. Mohamed Abshir Musse, whose faction controlled Northeastern Somalia in the early 1990s, was the most vocal about the ills of IUU fishing. He wrote a letter of protest directly to the Italian Prime Minister, and his

¹⁸⁸ Hansen, "Piracy in the Greater Gulf of Aden," 23-4.

¹⁸⁹ Hansen, "Piracy in the Greater Gulf of Aden." Puntland, and its Majerteen clan, was the main source of Somali-based piracy prior to 2004.

¹⁹⁰ "Report of the Panel of Experts on Somalia pursuant to Security Council resolution 1425," 44.

movement, the Somali Salvation Democratic Front (SSDF), was one of 12 factions that sent a joint statement of complaint to the UN and other international organizations about IUU fishing's adverse effects on Somalia's fishermen and its coastal environment.¹⁹¹ He was also among those who regularly received proceeds from the dubious licensing of fishing vessels, notably through Africa Fisheries Management (AFMET) run by the McAlister Elliot group.¹⁹² In 1997 the SSDF hijacked a Taiwanese fishing vessel, the MV *Shen Kno II*, and received \$1 million for its release.¹⁹³ This incident highlights the fact that even when motives were provided by the fisheries sector, piracy was still controlled by militia groups.

After 1991 the involvement of local fishermen in piracy is clearly established. Their vessels, especially the Glass Reinforced Plastic (GRP) boats specifically designed for fishing, were regularly used to transport armed militiamen to sea. ¹⁹⁴ The fishermen's boat handling skills and knowledge of the sea were important as the need to move farther from shore to intercept commercial vessels grew. Apart from the use of fishing boats in pirate attacks, there are many accounts of armed fishermen attacking vulnerable vessels. There was also a history of armed violence at sea between local fishermen from different clans, which made it easy for fishermen to become pirates and for pirates to hide among fishermen. ¹⁹⁵ Further proof of fishermen's involvement in piracy is documented in a field study by Hansen that found two former lobster companies in Puntland involved exclusively in piracy. ¹⁹⁶ The exact dates of their switching to piracy are not stated, but this probably happened after 2000 when lobster earnings in the region had fallen considerably.

The main grievance of local fishermen against IUU fishing vessels in the early years was the destruction of their nets and boats and the occasional loss of life. Adding to

¹⁹¹ Waldo, "The Two Piracies in Somalia."

¹⁹² "Report of the Panel of Experts on Somalia pursuant to Security Council resolution 1425," 44.

¹⁹³ Peter Pham, "Anti-Piracy, Adrift," *The Journal of International Security Affairs*, No. 18 (Spring 2010). http://www.securityaffairs.org/issues/2010/18/pham.php (accessed October 26, 2010).

^{194 &}quot;1995 IMB Annual Piracy Report," ICC-International Maritime Bureau, January 1996.

¹⁹⁵ Hansen, "Piracy in the Greater Gulf of Aden," 11.

¹⁹⁶ Ibid., 34.

this was the general frustration of watching helplessly as foreign vessels claimed Somalia's national riches. Somalis, even those in non-fishing communities, felt that they were being taken advantage of by foreign fishing vessels at a time when they were most vulnerable. If these two were legitimate grievances in the early 1990s, the depletion of artisanal fishery resources was not, since it happened slowly over the course of a decade. Furthermore, the discussions above showed that the depletion of lobster and shark stocks was due mostly to poor management and unsustainable exploitation by the artisanal fishermen themselves, and that foreign vessels only played an indirect role by pushing them much closer to shore.

The need to protect local fishermen and their equipment or to protect national riches from foreign exploitation provided ample motive for Somalis to go after IUU fishing vessels, but it does not explain the numerous attacks on non-fishing vessels in transit more than 12 NM from shore.¹⁹⁷ While the UNCLOS that governs all human activities in the maritime domain forbids any economic exploration and exploitation of resources within 200 NM of a coastal state's shores without its approval, it clearly allows for freedom of movement, especially outside the 12 NM range of claimable territorial sea.¹⁹⁸ By attacking non-fishing vessels in transit, Somali pirates made their grievances look more like excuses for their profit-seeking criminal activity.

Both the IMO and the IMB construct their data based on reports from victims of piracy, and one would expect underreporting by IUU vessels engaged in an illegal activity themselves. IUU vessels instead preferred to acquire weapons, buy protection from local militias, or pay a fine whenever hijacked. Nonetheless, other sources, drawing mostly from local accounts, show a large number of IUU fishing vessels attacked and many of them hijacked in Somali waters. ¹⁹⁹ Andrew Mwangura of the Mombasa-based

¹⁹⁷ Both IMO and IMB reports show that the majority of vessels attacked by Somalis during this period were non-fishing vessels in transit.

¹⁹⁸ Even within the 12 NM range the law allows for 'the right of innocent passage.' "United Nations Convention on the Law of the Sea," *United Nations Organization* (1982), http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf (accessed October 26, 2010).

¹⁹⁹ The Marine Resources Assessment Group (United Kingdom), the Seafarers' Assistance program (Kenya), and the Somali Fisheries Society document many cases of IUU fishing vessels captured by various Somali groups during this period.

Seafarers Assistance Program contends that more than 50 of 104 captured vessels in Somali waters between 1991 and 2005 were fishing vessels.²⁰⁰ Some locals recognized the negative effects of piracy, but felt that if all the attacks on foreign fishing vessels were publicized, then piracy against non-fishing vessels would be considered a negligible side effect of their fight against IUU fishing. Irrespective of the account one prefers to believe on the number and type of vessels captured, it seems quite clear, considering all the different sources cited above, that hijackings during this period were done mostly by warlords—not fishermen—and most of the captured vessels were non-fishing vessels.

State collapse definitely had an impact on piracy in Somali waters, with the rise in the number of attacks in the 1990s compared with previous decades. The lack of any state presence at sea permitted the invasion by IUU fishing vessels and the subsequent attempt by local groups to exercise authority in the name of protecting national assets. For both sides, in the absence of a state, the risks were considerably lower and the potential benefits high. Even though Somalia's MSC capacity was low prior to 1991, a vessel caught engaging in IUU fishing could possibly be impounded and its crew jailed in Somalia.²⁰¹ Without a state, an IUU fishing vessel's only risk was the possibility of an attack by armed men against which it could retaliate, and if captured it could guarantee safety by paying a fee. For the armed local groups, too, the risk was almost nonexistent as they could use indiscriminate force at sea with impunity. Whenever they encountered a hard target all they had to do was turn away and find a softer one.

So, the collapse of the state, because it created a vacuum at sea, set the conditions for piracy to rise. The rise in piracy, however, was only significant when compared with previous decades in Somalia. Nonexistent in the 1980s, piracy in Somalia grew a little in the 1990s, but was still quite low by global standards at the end of 2004. Piracy at this point was a novelty to most Somalis, and the unexpectedly high revenue derived from it, along with the licensing of foreign vessels were enough to satisfy the needs of the few warlords who were in control. Piracy was not yet the profit maximizing business that

²⁰⁰ Mwangura, "Workshop on Fishing Communities and sustainable Developments."

²⁰¹ Kulmiye, "Militia vs Trawlers: Who is the Villain?"

Mohamed Abdi Hassan was trying to set up in central Somalia, and this is probably why attacks against commercial vessels in transit stayed relatively low.

The dwindling number of economic opportunities after state collapse put tremendous pressure on the few sources of income that remained, with fisheries being the most attractive. As fisheries had been underexploited since independence, there was room to absorb the increased population pressure. However, the absence of any fishery management protocol led to the overexploitation of certain species after a few years of increased production. The decline in fisheries left many able-bodied men with no way to sustain their families and therefore exposed them to recruitment in criminal activities such as piracy. Frustration or the basic instinct for survival guided some Somali fishermen toward piracy, but they tended to be employees in a trade dominated by militiamen.

If the economic status of artisanal fishermen was the determining factor in levels of piracy, one would expect piracy to rise during periods of low fish production, and fall during periods of high fish production. The analysis above, even though made with incomplete data, shows quite unequivocally that there was no inverse relationship between piracy and fisheries, at least during the 14 years following state collapse. Apart from one discrepancy seen in 1996, there seemed instead to be a direct relationship between the two—both were low in the early 1990s, rose suddenly in the mid-1990s, and then declined at different rates up to 2004 (see Figure 6). Though only Puntland fisheries data was used in this analysis, it still reflected the general trends of piracy and fisheries in Somalia, since both activities were predominant in this area and absent or low in the rest of Somalia.

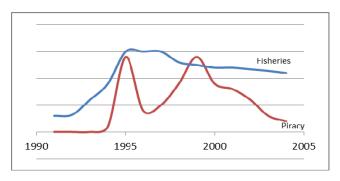


Figure 6. Somalia—Trends in piracy and fisheries after 1991.

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IV. SOMALIA: FISHERIES AND PIRACY AFTER THE TSUNAMI 2005–2010

A. INTRODUCTION

On December 26, 2004, a powerful underwater earthquake off the island of Sumatra, measuring 9.0 on the Richter scale, generated gigantic waves that devastated communities on the eastern and western borders of the Indian Ocean.²⁰² The effects of this tsunami were far more serious in Asia, but the waves were still strong enough to cause considerable damage by the time they made landfall in East Africa, more than 7000 kilometers from the earthquake's epicenter.²⁰³ Somalia was the hardest hit country in Africa, recording 289 deaths with about 44,000 more left in urgent need of food, potable water, healthcare, and shelter.²⁰⁴ Coastal and island communities in Somalia were affected, as far south as the Kenyan border and as far north as Cape Guardafui in Puntland. Today, many of them are still struggling to recover from the disaster with progress greatly hampered by the already complicated political, economic, and security issues prevailing within Somalia since 1991.

Fisheries and maritime piracy are both launched from, and are heavily dependent on, coastal communities, but this does not imply that the two activities are necessarily related. Though the grievances of local fishermen were used after 1991 to justify attacks at sea, trends in piracy and fisheries prior to the tsunami did not show an inverse relationship between the two (see Chapter III). This chapter looks at how each of these activities was affected by the 2004 tsunami, and investigates whether a more direct relationship developed between them thereafter.

²⁰² The 2004 tsunami affected 11 countries, killing a total of 150,000 people and leaving millions homeless. See "The Deadliest Tsunami in History?" *National Geographic News*, Updated January 7, 2005, http://news.nationalgeographic.com/news/pf/65467352.html (accessed September 2, 2010).

²⁰³ Adam Mynott, "Somalis Struggle to Rebuild Lives," *British Broadcasting Corporation*, January 13, 2005, http://news.bbc.co.uk/2/hi/africa/4169835.stm (accessed September 17, 2010).

²⁰⁴ "Tsunami Worsens Existing Vulnerability in Somalia," *Forced Migration Review*, 2005, http://www.fmreview.org/FMRpdfs/Tsunami/26.pdf (accessed July 12, 2010).

The discussion will focus on the semi-autonomous entity of Puntland, as well as Central and South Somalia. The breakaway Republic of Somaliland will be left out for three main reasons. First, its geographic location, away from the Indian Ocean, meant that it was shielded from the devastating effects of the tsunami. Second, fisheries there never constituted a significant part of Somaliland's economy due to the predominantly pastoral culture of its population (see Chapter III). Third, piracy off the Somaliland coast, which was conducted by the SNM as a tactic of insurgency in the late 1980s and early 1990s (see Chapter II), practically ceased soon after independence. The Somaliland authorities have since been successful in clamping down on piracy within their waters originating mostly from outside groups.²⁰⁵

B. FISHERIES IN SOMALIA AFTER THE TSUNAMI

Artisanal fish production was already on the decline before the tsunami, but it still generated revenues sufficient to sustain the many households that depended on it. The decline was blamed on the rapid depletion of stocks due to unsustainable exploitation, and the tsunami made this situation worse by destroying fishing equipment and land-based infrastructure. In the immediate aftermath of the tsunami about 44,000 people lost their source of livelihood and were in urgent need of external assistance. Due to Somalia's isolation from the outside world and the inaccessibility of many of its coastal villages, the dire situation in fishing communities was not known until three days after the event. The first supplies of food and potable water came on the 30th of December from European forces in neighboring Djibouti, as well as from the WFP.²⁰⁶ After initial assessments by a joint international interagency team, it was realized that most of the affected population would have to be sustained via external aid until the next fishing

Martin Plaut, "Tsunami: Somalia's slow recovery," *British Broadcasting Corporation*, Last updated December 26, 2005, http://news.bbc.co.uk/2/hi/africa/4560246.stm (accessed September 18, 2010).

²⁰⁵ Shashank Bengali, "An Interview with a Jailed Somali Pirate Leader," *The Christian Science Monitor*, May 3, 2009, http://www.csmonitor.com/World/Africa/2009/0503/p06s12-woaf.html (accessed April 18, 2010).

^{206 &}quot;WFP Convoy Reaches Victims of Tsunami Waves in Somalia," *World Food Program*, December 30, 2004, http://one.wfp.org/newsroom/in_brief/asia/tsunami/041231_tsunami.asp?section=2&sub_section=2 (accessed September 18, 2010). The contribution of European forces was reported by BBC News, See

season, which was ten months away.²⁰⁷ During this period, repair and replacement of damaged fishing gear was made a priority in order to facilitate a return to normalcy for the fishermen. International organizations and aid agencies all echoed the need to rebuild better communities, and saw post-tsunami reconstruction as an opportunity to fix fishing villages that had suffered from insecurity and neglect since 1991.²⁰⁸

1. The Bajuni Community

One group that required special attention was the Bajuni community in the south. The Bajuni are an ethnic minority with the longest history of fishing in Somalia. As successive droughts and civil war pushed many ethnic Somalis to resettle along the coast, the vulnerable Bajuni migrated to islands, such as Kayoma, Fuma, Mdoa, and Jula, off Kismayo where they felt relatively more secure.²⁰⁹ The tsunami destroyed their homes and fishing gear—about 200 boats and 5,000 nets—leaving this community of about 13,500 totally despondent.²¹⁰ Many moved to the mainland and settled into already existing Internally Displaced People (IDP) camps, and those who stayed behind were afraid to go back out to sea, still overwhelmed by the sudden devastation that had befallen them.²¹¹ Food, potable water, and sanitation were immediate needs, and aid supplies from the Red Cross, WFP, and the World Concern Development Organization (WCDO) helped to prevent starvation and the spread of disease on the mainland and islands in the south. By June 2005, WCDO had provided three months' worth of food rations to more than 14,000 people, some shelter and enough fishing gear for 300 Bajuni

^{207 &}quot;Tsunami Inter Agency Assessment Mission: Northeast Somali Coastline," *World Health Organization*, February 2005, http://www.who.int/hac/crises/international/asia_tsunami/som/somalia_report_8feb.pdf (accessed July 8, 2010).

²⁰⁸ The Food and Agricultural Organization (FAO) reopened its offices in Somalia in April 2005 and has been instrumental in coordinating assistance to local fishermen hit by the tsunami. Other major participating organizations include Action Aid, Save the Children, UNICEF, WFP, UN Habitat, OCHA, as well as governments and churches worldwide. See the situation reports on Somalia at http://www.fao.org/tsunami/fisheries/somalia.htm.

²⁰⁹ "Somalia Tsunami Relief Program: Quarterly/Final Program Report," *World Concern Development Organization*, August 4, 2005, 2, http://pdf.usaid.gov/pdf docs/PDACF237.pdf (accessed July 8, 2010).

²¹⁰ Ibid.

²¹¹ Ibid.

families to resume their trade.²¹² Given that this represented only 1/9 of the total population, the efforts of aid organizations in the south were quite commendable, but fell well short of expectations mostly due to the long-standing climate of insecurity in and around Kismayo.

2. Central and Southern Somalia

Between June and August 2005, a team from the FAO visited more than 30 fishing communities in central and south Somalia to assess the impact of the tsunami there.²¹³ This team found that though the impact of the tsunami was less severe than it was farther north in Puntland, the fisheries sector was still in dire need of assistance after years of insecurity and neglect. The team had to skip some fishing communities around areas such as Hobyo and Harardhere due to security concerns, but its findings reflected the general state of artisanal fisheries in coastal communities south of Puntland.²¹⁴

Out of a total of about 22,000 fishermen in central and southern Somalia, about 5 percent (more than 1,000 men) had emigrated away from fishing villages after the tsunami, while many of the nearly 5,000 seasonal fishermen had already returned home. After many years of neglect there were few operational support infrastructures (see Chapter III), and these suffered little or no damage from the tsunami, except for a storage facility at Adale whose walls collapsed under pressure from the surging waves. The greater damage was to fishing equipment present in the water or near the shore at the time of the tsunami. More than 800 boats (both wooden and fiberglass), about 300 outboard engines, and 28,000 nets were either lost or in need of repairs. Although the amount of fishing equipment unaffected by the tsunami was not given in the assessment

^{212 &}quot;Somalia Tsunami Relief Program," 9.

²¹³ Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia."

²¹⁴ Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia." It was believed that many of the fishermen from insecure areas like Hobyo had resettled in other fishing communities.

²¹⁵ The remaining 75 percent were permanent fishermen who had nothing else to turn to. See Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia."

²¹⁶ Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia," 15.

²¹⁷ Ibid.

report, it is very likely that some boats remained operational, since it would be difficult to imagine that 800 boats were enough to accommodate the reported 22,000 fishermen—implying an average of more than 25 fishermen per boat. However, the loss of 28,000 nets was quite significant and by itself could impede fishing even for those who still had boats and engines. Overall, it was estimated that artisanal fisheries in central and southern Somalia had suffered more from state collapse and the ensuing lawlessness than from the tsunami. Years of unsustainable exploitation, poor conservation techniques, lack of processing facilities, and limited access to markets all contributed to push artisanal fisheries ever closer to collapse, long before the tsunami came.

3. Puntland

The Northeastern coast of Somalia (Puntland) was where almost all 289 tsunamirelated deaths were registered, and also where the greatest destruction occurred. The town
of Hafun, for example, was completely wiped out, and had to be rebuilt 500 meters inland
from its original site.²¹⁸ Along the 650-kilometer stretch of coastline between Garacad
and Hafun in Puntland, a total of about 630 fishing boats were either lost or destroyed,
and about 28,000 people were affected.²¹⁹ The tsunami struck at the peak of the fishing
season when the population density along the coast is made higher by the influx of
seasonal fishermen. Since there was no hope for further harvest before the end of the
season in April, these seasonal fishermen either moved back to their homes or migrated
to city centers to find petty jobs that could help make up for the loss in expected fisheries
revenue. The full-time fishermen were in a more desperate situation because they had
nowhere to go. Some of them had lost relatives, many more had lost homes, and most

²¹⁸ The UN Habitat, in collaboration with local authorities, built 203 houses, a pier and fish processing centers. The finished project (which cost \$1.5 million) was handed over to the local community in December 2007. See "Reconstruction of Tsunami-damaged Xaafuun Town," *UN Habitat* (2008), http://www.unhabitat.org/content.asp?cid=4541&catid=233&typeid=13&subMenuId=0# (accessed September 17, 2010).

²¹⁹ "Tsunami Inter Agency Assessment Mission."

were left without the necessary equipment to continue fishing. An estimated 80 percent of their fishing equipment was destroyed, of which only 30 percent could eventually be repaired.²²⁰

Fisheries in Puntland were on the decline before the tsunami, but catches had still been good enough to offer coastal populations as much as five times more revenue than their average compatriots elsewhere in the country.²²¹ The tsunami brought the thriving fisheries trade to an abrupt halt, thereby making previously self-sufficient communities highly dependent on external aid. Permanent fishermen derived about 80 percent of their revenue directly from fisheries, while the remaining 20 percent came from shops and other small commercial enterprises run by women. Remittances from relatives abroad played a small role within these communities before the tsunami, but became vitally important to many families thereafter.²²² Two months after the tsunami, only 25 percent of Puntland's fishermen had returned to sea, eager to make the best out of the remaining few weeks of the fishing season. ²²³

Despite its hugely negative impact, the tsunami had some positive consequences for Somali fisheries. Firstly, it generated world sympathy, permitting the return of foreign aid. Most of the aid agencies present in Somalia had closed shop after the departure of UN forces in 1995, and those who stayed behind focused on providing basic assistance—food, water, and shelter—to IDPs. Aid to fisheries stayed insignificantly low over the years, leading to the rapid degradation of all support infrastructure. The tsunami put Somali fisheries back in the spotlight. Secondly, the adversity caused by the tsunami's destruction forced local communities to pull together to better manage scarce collective resources, and therefore reinforced local governance in the absence of a national central authority. Thirdly, the tsunami interrupted the over-exploitation of certain species, such

²²⁰ "Tsunami Inter Agency Assessment Mission," 20.

^{221 &}quot;Tsunami Inter Agency Assessment Mission." Poor fishermen made between \$1,000-\$2,500/year; the average annual revenue in Somalia was about \$300. The annual worth of fisheries trade to the local community in Puntland is estimated at \$11 million.

²²² "Tsunami Inter Agency Assessment Mission," 27.

²²³ Ibid.

as lobsters and sharks, which were already quite close to collapse.²²⁴ The ensuing months of minimal fishing activity definitely helped the regeneration of these two species, which were the basis of the coastal economy in Puntland. The short-term loss in revenue permitted the survival of species for longer term benefits. Interestingly, the tsunami interagency assessment team in Puntland found that only an estimated 30 percent of fishery stocks were being exploited, and that the choice of species harvested was driven by specific market demands.²²⁵ So, with better organization of the fisheries sector fishermen could diversify their catch and reduce the pressure on lobsters, sharks, and king fish. Also, the improvement of conservation techniques to minimize post-catch losses, and the development of markets for the other species, such as tuna and mackerel, would lead to a more sustainable exploitation of fishery resources, and thus take away the principal grievance that local fishermen had against IUU vessels—namely, the depletion of stocks. Applying aid to reshape the market structure for Somali fishery products would provide many challenges to international donors and reconstruction teams, especially since the traders who dominated the sector were quite happy with the existing distribution of roles.²²⁶

4. Reconstruction

After providing food, potable water, and sanitation to affected populations, the efforts of aid donors and reconstruction teams turned to the replacement of damaged equipment that would permit fishing communities to be self-sufficient again. It was apparent from the beginning that coordination was essential among the many participating agencies in order to avoid overlap, especially since available resources were deemed insufficient to meet the identified objectives.²²⁷ The Humanitarian Assistance and Disaster Management Agency (HADMA) was established by the Puntland authorities to coordinate all relief efforts there, but the lead role in implementation was assumed by

²²⁴ Tello, "Fisheries Tsunami Emergency Programme – Somalia."

^{225 &}quot;Tsunami Inter Agency Assessment Mission," 36–7, 40.

²²⁶ Tello, "Fisheries Tsunami Emergency Programme – Somalia," 10, 14.

²²⁷ Ibid., 11.

the FAO due to its long-standing expertise on fishery matters. The FAO estimated that more than \$3 million would be necessary to meet basic objectives, ²²⁸ and submitted an initial demand for \$1,925 million to the UN Flash Appeal set up to collect and distribute funds to all tsunami-affected countries. ²²⁹ By October 2005, the start of the new fishing season, the FAO had already received about \$1.4 million from various donors, and, working with the HADMA, was targeting 2,000 fishermen in 28 fishing villages. ²³⁰ Even though funds were made available in a timely manner, many fishermen entered the new season in October still lacking essential gear mainly because the movement of people out of fishing communities in the off-season made it difficult to assess their collective needs. The available funds were eventually used to procure boats, engines, and fishing gear, and to train locals on fish handling and processing, the management of marine resources, and the repair of outboard engines. All these were vital to the reconstruction process, and by March 2006 the FAO had received a combined total of about \$3.1 million, enabling it to reach even more communities. ²³¹

The distribution of aid was made a lot easier in Puntland by the presence of government structures and a better security climate, but was greatly limited by the poor state of road infrastructure that made some areas almost inaccessible. Coordinating the distribution of aid also proved to be a challenge as some organizations provided equipment to certain fishing communities without proper assessment and consultations. For example, in August 2005, the NGO United Nations Association (UNA) donated 11 boats to Bender Beyla, seven of which were reportedly seized by traders from recipients who owed them money—a situation that could have been avoided had there been

^{228 &}quot;Tsunami Reconstruction: Challenges Ahead and Funding Needs," *Food and Agricultural Organization* (n. d.), http://www.fao.org/tsunami/challenge.asp (accessed May 16, 2010).

^{229 &}quot;FAO Situation Reports – Somalia – Tsunami," *Food and Agricultural Organization*, February 8, 2005, ftp://ftp.fao.org/FI/DOCUMENT/tsunamis_05/somalia/FAOAgencyReport-Somalia_08-02-05.pdf (accessed September 10, 2010).

^{230 &}quot;Tsunami Reconstruction: Somalia Status Report," *Food and Agricultural Organization*, October 31, 2005, ftp://ftp.fao.org/FI/DOCUMENT/tsunamis_05/somalia/FAOAgencyReport-Somalia_31-10-05.pdf (accessed September 10, 2010).

^{231 &}quot;Tsunami Reconstruction: Somalia Status Report," *Food and Agricultural Organization*, March 31, 2006, ftp://ftp.fao.org/FI/DOCUMENT/tsunamis_05/somalia/FAOAgencyReport-Somalia_31-03-06.pdf (accessed September 10, 2010).

coordination with other agencies and a preliminary assessment of the community's market structure.²³² The FAO, backed by Puntland authorities, went to great lengths to discourage the donation of lobster fishing equipment in order to protect this threatened species, much to the chagrin of traders and fishermen who hitherto depended on it. This measure could have facilitated a diversification of the catch, thereby contributing to the goal of sustainable exploitation of marine resources, but it was undermined by independent donors, such as CARE International, who provided lobster fishing gear directly to certain communities.²³³

External actors succeeded in preventing a humanitarian catastrophe after the tsunami, but found it to be a far bigger challenge meeting the objective of rebuilding fishing communities to a standard higher than that of the pre-tsunami years. A large inflow of foreign aid permitted devastated communities like Hafun to be rebuilt from scratch, with houses, salt-free wells, processing centers, and a pier to host the donated boats.²³⁴ Other areas in Puntland, such as Bender Beyla, Garacad, and Eyl, also benefitted from the donation of boats, among other things, but two years after the tsunami fewer than 200 boats had been distributed to replace those destroyed.²³⁵ Granted, the new boats were bigger and meant to satisfy the collective needs of fishermen grouped into associations, but 200 was a relatively small number. Equipment donated through the FAO and financed by funds from the UN Flash Appeal included only 60 fiberglass boats, which, by FAO's own estimate, were about 100 boats shy of meeting the objectives in Puntland alone.²³⁶ The UN Flash Appeal set up for post-tsunami relief was closed in June 2006,²³⁷ and though aid continued to flow into Somalia from other sources, the focus shifted back to the perennial problems of starvation and instability in the greater part of

²³² Tello, "Fisheries Tsunami Emergency Programme – Somalia," 14.

²³³ Ibid., 8.

²³⁴ UN Habitat built the houses while the NGO, Action Aid provided an initial consignment of 40 boats to Hafun. See BBC article by Plaut, "Tsunami: Somalia's slow recovery."

^{235 200} is a generous estimate that accounts for the 60 from FAO, 40 from Action Aid, 11 from UNA, and a few more from individual donors and other NGOs.

²³⁶ Tello, "Fisheries Tsunami Emergency Programme – Somalia," 12.

^{237 &}quot;Tsunami Reconstruction: Challenges Ahead and Funding Needs."

the country. It was realized that fishing communities could not be stood up without addressing some of the bigger problems in Somalia. Better roads, for example, were an absolute necessity if fishermen were to have access to bigger markets and better storage and processing facilities. Some of these roads would have to go through insecure areas, and their construction would require funds and local political will far beyond the capacity of aid organizations. Considering, also, that Somalis are generally not very fond of fish, the main hope for the artisanal fishery sector was a vibrant export market that aid organizations could not reshape simply by operating within Somalia.

Based on existing trends in demand, controlled by UAE and Somali traders in Dubai, certain species would continue to be ignored while others would be exploited to the point of extinction. Both the semi-autonomous region of Puntland and the TFG of Somalia have a Ministry of Fisheries, but neither is equipped to play the regulatory role that a sustainable management of marine resources requires. For starters, stocks needed to be assessed to determine which species were in danger. Local authorities lacked both qualified manpower and the material resources necessary to assess the quantity of fish landed by the artisanal fishermen,²³⁸ let alone that of the numerous industrial fishing vessels present in Somali waters.

5. Trends in Fisheries Production

Pre-tsunami annual artisanal fish production was estimated at 11,000 MT (see Chapter III). Immediately after the tsunami production fell sharply to about a quarter of its previous value due to lack of equipment and fear of the sea by many fishermen. Production then rose gradually until 2008, to about half of the pre-tsunami value, fueled by external aid donations in fishing equipment, storage and processing facilities, and training. The drastic reduction in aid to fisheries after 2007 meant that many of the pre-tsunami fishermen continued to lack the necessary equipment to resume their trade, so production could not grow any further and is shown in Figure 7 to have leveled off after 2008.

^{238 &}quot;Feasibility Report on the fisheries sector in Puntland."

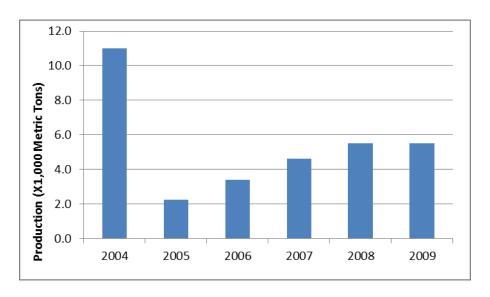


Figure 7. Somalia—Artisanal fish production 2004–2009. ²³⁹

C. PIRACY IN SOMALIA AFTER THE TSUNAMI

1. Trends

Since 2005, piracy incidents off the Somali coast have increased to levels unmatched anywhere or at any other time in history. At its peak in 2000, Southeast Asian piracy—in the waters off Indonesia, Malaysia, and in the Strait of Malacca—recorded a total of 215 incidents;²⁴⁰ by comparison, incidents attributed to Somali pirates in 2009 alone numbered 217, more than half of the world total.²⁴¹ The rise in Somali piracy has been quite significant in recent years (see Figure 8 below), growing not just in the frequency of incidents, but also in the sophistication of attacks and in the distance of operations from Somali shores. Attacks by Somali pirates were confined within a 100-NM radius from land before the tsunami, but the range of attempted attacks quickly

²³⁹ Values are conservative estimates; not based on any existing data.

^{240 &}quot;2000 IMB Annual Piracy Report," International Maritime Bureau.

²⁴¹ These numbers represent both successful and unsuccessful attempts. "2009 IMB Annual Piracy Report."

increased from 165 NM in 2005 to 1,100 NM in March 2010.²⁴² Vessels have been attacked as far south as the Seychelles, as far east as the Maldives, and as far north as the coast of Oman, in the Arabian Sea.²⁴³

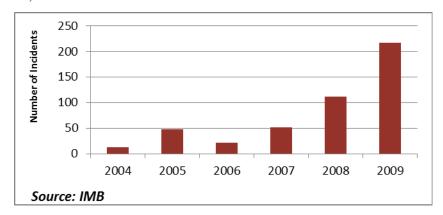


Figure 8. Somalia—Piracy Trends 2004–2009.

Piracy increased four-fold in 2005, and, apart from the dip in 2006, there has been an annual rise of about 100 percent ever since. The reduction in Somali-based pirate activity in 2006 has been largely attributed to the six-month rule of the Islamic Courts Union (ICU).²⁴⁴ The ICU was created in 2001 from the fusion of eleven clan-based Islamic courts, which had gained popularity within their respective communities by providing basic services and establishing a semblance of order under strict Islamic law.²⁴⁵ During its rule, characterized by the use of extreme measures, such as amputations and public executions, the ICU curtailed crime on land and dissuaded maritime piracy that it considered to be thievery.

A demonstration of the ICU's resolve to tackle piracy was seen in November 2006 when its fighters stormed and liberated a hijacked ship and captured eight pirates

²⁴² "Navies Struggle with Swarming Pirates," *British Broadcasting Corporation*, last updated April 1, 2010, http://news.bbc.co.uk/2/hi/africa/8598726.stm (accessed April 4, 2010).

²⁴³ Ibid.

²⁴⁴ Bruce Crumley, "Ridding Somalia of Pirates: Hard Choices for the West," *TIME Magazine*, April 29, 2009, http://www.time.com/time/world/article/0,8599,1894395,00.html (accessed October 3, 2010).

²⁴⁵ An overwhelming majority of Somalis are Sunni Muslims, and they increasingly turned to their faith for leadership after state collapse in 1991. "The Supreme Islamic Courts Union," (n. d.), http://www.globalsecurity.org/military/world/para/icu.htm (accessed October 3, 2010).

who were demanding a \$1 million ransom.²⁴⁶ By June 2006, the ICU controlled most of southern and central Somalia, including Mogadishu, but was kicked out of power by a U.S.-backed Ethiopian invasion in January of the following year. The ICU had been branded as a terrorist organization by the U.S., and some of its leaders were said to have ties to Al Qaeda. The ICU was replaced by a TFG, which has neither been able to garner popular support, nor expand its authority outside Mogadishu.²⁴⁷

2. Toxic Waste Dumping

Ample motives and opportunities for piracy off the Somali coast existed for many years before the tsunami (see Chapter III), but had not reached the level of attacks seen after 2004. The main factor cited by locals to explain the sudden rise in piracy since 2005 has been the dumping of toxic wastes by foreign powers within Somali waters. Though allegations of toxic waste dumping date back to the early 1990s,²⁴⁸ it was after the tsunami that the phenomenon gained international recognition and drew widespread condemnation, including from the UN.²⁴⁹ Locals complained of containers washed ashore by the tsunami waves whose contents caused previously unknown skin and lung infections,²⁵⁰ and Nick Nuttal of UNEP highlighted the increased danger that Somalis were exposed to from toxic industrial wastes in the immediate aftermath of the

²⁴⁶ Under *Sharia law*, the pirates risked losing an arm and a leg. See "Somali Islamic Courts Crack Down on Piracy," November 23, 2006, http://www.noonsite.com/Members/doina/R2006-11-22-3 (accessed October 4, 2010).

²⁴⁷ The success of the ICU gives credence to many who believe that eradicating piracy in the HOA depends on the establishment of the rule of law within Somalia. Still, some argue that stability alone will not solve the problem, using Puntland as an example to show that piracy actually needs some form of law and order to thrive. Furthermore, piracy has flourished for many years around countries with stable governments (for example, the Strait of Malacca and the South China Sea). Although it is an interesting topic of debate, the relationship between coastal state stability and the level of maritime piracy is beyond the central theme of this chapter.

²⁴⁸ Rosita Johnson, "Somali Pirates Began as Volunteer Coast Guard," *People's World*, April 22, 2009, http://www.peoplesworld.org/somali-pirates-began-as-volunteer-coast-guard/ (accessed August 27, 2010).

²⁴⁹ The UN envoy for Somalia, Ahmedou Ould-Abdallah refused to name the guilty parties, but said there was reliable information confirming toxic waste dumping in Somali waters. See Najad Abdullahi, "Toxic Waste Behind Somali Piracy," *Aljazeera*, last updated October 11, 2008, http://english.aljazeera.net/news/africa/2008/10/2008109174223218644.html (accessed September 18, 2010).

²⁵⁰ Dan Eden, "Somali Pirates: The Other Side of the Story," *Viewzone* (n.d.), http://viewzone2.com/piratesx.html (accessed September 17, 2010).

tsunami.²⁵¹ However, a UN fact-finding team sent to investigate concluded that the reports were unsubstantiated. It found instead that poor sanitary conditions and the improper disposal of sewage and other hazardous materials by coastal populations in Somalia posed the biggest threat to their health.²⁵² The report did not refute the dumping of wastes in Somali waters by foreign vessels, but it stated clearly that no diseases or environmental degradation in Somalia could be directly linked to it.

Well-founded or not, the allegations of toxic waste dumping provided an additional means by which pirates reinforced the already strong legitimacy that they enjoyed within their local communities.²⁵³ Somalis generally feel that the ransom money pirates collect is little compensation for the many years of unabated exploitation by foreign powers, through IUU fishing and the dumping of toxic wastes.²⁵⁴ This argument has been used by many Somalis to justify attacks on all types of vessels, even those not involved in IUU fishing or toxic waste dumping.²⁵⁵ However, the pirates themselves are at a loss to explain why they hijack ships carrying relief supplies destined for Somalia. The first such hijacking occurred in June 2005 when a WFP-hired vessel carrying two months worth of food supplies to tsunami victims in Puntland was taken by pirates 32 NM off the coastal town of Harardhere.²⁵⁶ This attack turned out not to have been a mistake, as many more aid-carrying vessels destined for Somalia were attacked in the

²⁵¹ Abdullahi, "Toxic Waste Behind Somali Piracy."

²⁵² Initial UN missions to Eyl, Hafun and Bender Beyla in May 2005 found no evidence of toxic waste dumping, but called for a more detailed assessment which has never been carried out. "The State of the Environment in Somalia." 26, 33.

^{253 &}quot;Somalis Speak Out: Why We Do Not Condemn Our Pirates," *San Francisco Bay View*, April 13, 2009, http://sfbayview.com/2009/somalis-speak-out-why-we-don%E2%80%99t-condemn-our-pirates/ (accessed September 17, 2010).

²⁵⁴ Paul Salopek, "Somali piracy 'like a resource swap'," *The Seattle Times*, October 15, 2008, http://seattletimes.nwsource.com/cgi-bin/PrintStory.pl?document_id=2008267714&zsection_id=2003905675&slug=pirates15&date=20081015 (accessed September 17, 2010).

²⁵⁵ Abdullahi, "Toxic Waste Behind Somali Piracy."

²⁵⁶ "Hijacking of Relief Food Vessel to Somalia Forces WFP to Suspend Further Shipments," *World Food Program*, July 4, 2005, http://one.wfp.org/english/?ModuleID=137&Key=1338 (accessed September 18, 2010).

following years.²⁵⁷ Grievances surely had provided the earlier motives for piracy, but it was clearly now an enterprise driven by greed.²⁵⁸

3. The Business of Piracy

The idea of piracy as a profit-seeking business was hatched in Harardhere in 2003 by Mohamed Abdi Hassan (see Chapter III), and by 2005 it had fully blossomed and was attracting recruits from far inland who had no previous maritime experience. Though Puntland continued to host some of the most successful pirate groups, communities farther south were fast catching up. Years of drought and rampant clan violence left coastal communities around Harardhere and Hobyo with virtually no economic opportunities. Furthermore, these struggling communities suffered some losses in fishing equipment during the tsunami, but, unlike other coastal communities in central Somalia, they did not benefit from post-tsunami aid due to their prevailing climate of insecurity. 260

Even in those areas where relative peace permitted some form of economic activity, able-bodied men could get only very low paying jobs due to their generally high levels of illiteracy.²⁶¹ Piracy, and its promise of instant wealth at minimal personal risk, became a popular choice for many. Just one successful hijacking with a \$1 million ransom payment could earn a pirate about \$10,000—a life-changing sum he could not get

^{257 10} Humanitarian relief vessels were attacked by Somali pirates between June 2005 and April 2009. See Nincic, "Maritime Piracy in Africa: The humanitarian dimension." See also Tom Zeller Jr., "Off Somalia, There Be (Lots of) Pirates," *The New York Times*, February 26, 2007, http://thelede.blogs.nytimes.com/2007/02/26/off-somalia-there-be-lots-of-pirates/?pagemode=print (accessed September 17, 2010).

²⁵⁸ Menkhaus, "Dangerous Waters."

²⁵⁹ A truck driver in Hobyo joined a pirate group in 2005, and barely a year later he had netted \$70,000 as his share from ransom payments. See Hansen, "Piracy in the greater Gulf of Aden," 38.

²⁶⁰ Burale, "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia."

²⁶¹ "Piracy Off the Somali Coast: Workshop commissioned by the Special Representative of the Secretary General of the UN to Somalia, Ambassador Ahmedou Ould- Abdallah," *United Nations Organization*, November 2008,

http://www.imcsnet.org/imcs/docs/somalia piracy intl experts report consolidated.pdf (accessed January 12, 2010).

from any other source.²⁶² Some of the ransom money was reinvested in equipment and logistics, and also used to pay off government and other local officials.²⁶³

This business model turned out to be profitable for more than just the pirates who venture out to sea; the wider society benefits too, as the inflow of cash transforms previously destitute communities into "boomtowns."²⁶⁴ In places like Harardhere, Hobyo, and Eyl, piracy is the only business in town; the pirates construct and live in modern houses, drive new cars, and, thanks to generators, bring electricity to areas that had been in the dark for more than 20 years. Businesses have also sprung up within these communities to cater to the pirates' every need, from food for their hostages to the narcotic, qat, that the pirates consume in great quantities, especially during their long deployments at sea.²⁶⁵

Piracy in Somalia employs about 5,000 men and provides indirect benefits to many more.²⁶⁶ The lucrative nature of piracy has tempted some to embark on individual missions, accompanied by relatives in their personal skiffs, but the greatest successes so far have been registered by organized groups. There are five main groups operating out of Eyl, Garacad, Hobyo, Harardhere, and Mogadishu—all coastal towns in Puntland and central Somalia.²⁶⁷ Some have been in business since 2005, and have shown a great capacity to adapt to their changing environment.

^{262 &}quot;Piracy Off the Somali Coast," 17.

²⁶³ Gilpin, "Counting the Cost of Somali Piracy." This article clearly outlines the business model. Though the percentages may vary, it is estimated that government officials get about 30% of ransom payments; bosses of the organization, 20%; pirates, 30%; while the remaining 20% is reinvested in the business.

²⁶⁴ Ransoms brought in more than \$30 million in 2008. See "Somali Pirates Turn Villages into Boomtowns," *Associated Press*, updated November 19, 2008, http://www.msnbc.com/id/27806965/ (accessed May 24, 2010).

²⁶⁵ Ibid.

²⁶⁶ James Kraska and Brian Wilson, "The Global Maritime Partnership and Somali Piracy," *Defense & Security Analysis*, 25:3, 225, September 2009, http://pdfserve.informaworld.com/537205_793890206_915994269.pdf (accessed October 8, 2010).

²⁶⁷ "Piracy Off the Somali Coast."

4. Change in Pirate Tactics

The change in pirate tactics observed in recent years was influenced by the presence of international naval patrols, and made possible by the adaptive structure of the business model. Since 2008, an impressive armada of naval vessels from more than twenty countries, including the U.S., Russia, and China, patrols the waters off the HOA, but has not been able to curtail the rise in piracy. 268 The forward-looking organizers of piracy have reinvested in tools—such as portable GPS devices and satellite phones—that enable their agents to get around the constraints of repression at sea. They acquired bigger engines to overcome the speed deficit problem they had experienced in previous years (see Chapter III), and adopted the concept of a "mother ship" into their primary mode of operation. A mother ship offers three main advantages over small skiffs. First,, it is generally more seaworthy, providing more comfort and safety during long deployments on the open ocean. Second, it is big enough to accommodate the speedboats used in the final approach, and has enough room to store fuel, food and other supplies.²⁶⁹ The mother ship is thus an important logistics asset that does not only extend the range of operations, but also enables longer deployments away from home bases. Third, the mother ship is usually a fishing boat or a commercial vessel, and therefore blends in nicely with the normal maritime traffic in the area. It offers a deceptive cover, enabling the pirates to avoid detection by naval patrols and to guarantee an element of surprise by masking their intention from potential targets until they are close enough to launch an attack.

The international naval presence and the increased vigilance onboard commercial vessels have made surprise a vital piece of successful pirate operations. The old tactics pirates used of approaching from miles away in small, low speed boats, firing warning shots and announcing their affiliation with the Somali Coast Guard would not have worked in this new environment, and the pirates were quick to adapt. Worth noting is that

²⁶⁸ Matthew Harwood, "Multinational Cooperation Tries to Take Fight to Somalia's Pirates," *Security Management*, September 2009, http://www.securitymanagement.com/news/multinational-cooperation-tries-take-fight-somalias-pirates-006197 (accessed January 24, 2010).

²⁶⁹ "Maritime Security: Actions Needed to Assess and Update Plan and Enhance Collaboration among Partners Involved in Countering Piracy off the Horn of Africa," *United States Government Accountability Office*, September 2010, 9, http://www.gao.gov/new.items/d10856.pdf (accessed September 30, 2010).

most of the mother ships are involuntary participants in pirate operations, as they are captured, used, and then released after a successful mission, or when the ship or pirates run out of supplies.²⁷⁰ There have also been reports of secondary bases in Yemen where the Somali pirates can refuel and retool.²⁷¹ This gives them extra safe havens, extends their reach, and prolongs their ability to stay at sea. This also makes analysis of their navigation patterns by naval surveillance difficult, as they do not always come from, or return to, Somalia.

As to how the business model brought greater success to post-tsunami pirates than to militia groups in the 1990s, those groups were more interested in asserting their political authority on land, and attacked only those vessels from which their leaders had not received levies. As separate groups issued fake licenses to, and felt the need to protect, different vessels they eventually found themselves pitted against each other, thereby minimizing their otherwise huge potential for collective gain. Since these competing groups could not offer protection to the many vessels for which they received levies, this situation proved unsustainable over time. In contrast, the business model freed pirates of these constraints from the outset. They did not assume any Coast Guard duties, or the obligation to protect certain vessels. Their only objective was to make profit, and any target that held the promise of a ransom was considered fair game. Reinvesting in the business also increased the success rate of attacks and guaranteed growth in a way that the militia groups in the 1990s could not.

As of September 2010, there were 22 commercial vessels under the control of Somali pirates—the highest number yet.²⁷² Also, 529 hostages were taken in the first half of 2010, nineteen more than in the same period of 2009.²⁷³ At this rate, the 2010 annual figures for Somali piracy are bound to surpass the already record-setting numbers of

^{270 &}quot;2009 IMB Annual Piracy Report," 28.

²⁷¹ Kelly McEvers, "In Anti-Piracy Fight, Yemen May Be Part Of Problem," *National Public Radio*, May 8, 2009, http://www.npr.org/templates/story/story.php?storyId=103904390 (accessed September 5, 2010).

²⁷² Jean-Marc Mojon, "In the Heart of a Somali Pirate's Lair," *Agence France Presse*, September 2, 2010, http://www.thejakartaglobe.com/afp/in-the-heart-of-a-somali-pirates-lair/394359 (accessed September 17, 2010).

²⁷³ "Maritime Security: Actions Needed," 26.

2009. Though counter-piracy efforts have scored some victories in recent months, it is quite clear that the pirates are still able to make a good living. Sitting next to 2.5 million square miles of waters with heavy maritime traffic,²⁷⁴ it seems the pirates will always have plenty of soft targets to prey on. The mandate of the EU counter-piracy mission—*Operation Atalanta*—has been extended to December 2012,²⁷⁵ but it is difficult to predict how long the international community will be able or willing to sustain a strong naval presence in the area at the current collective cost of about \$3 million a day.²⁷⁶ Overall, Somali piracy is costing the global economy more than \$1 billion a year,²⁷⁷ and increasingly there is the recognition that repression at sea will not be sufficient. Though it is currently just an enterprise for profit, Somali piracy has the potential to fuel local wars, increase regional instability, and be exploited by international terrorist groups in order to inflict a bigger blow to the global economy.²⁷⁸

D. ANALYSES AND CONCLUSION

As the discussion above indicates, fisheries were on the decline after the tsunami—just as piracy was rising. The trends in Figure 9 do not show a direct inverse relationship between the two activities through the entire period, but 2005 definitely marked a turning point for both.

^{275 &}quot;Maritime Security: Actions Needed," 77.

²⁷⁶ Hansen, "Piracy in the greater Gulf of Aden," 50. This daily estimate is derived from the cost of deploying a European frigate (\$30.7 million for 6 months) and multiplying that by the average number of 18 platforms involved in daily patrols. It is also estimated that U.S. Central Command spends about \$64 million a year on counter piracy in the HOA. Using the same procedure as above, also gives an approximate daily cost of \$3 million. See "Maritime Security: Actions Needed," 33.

²⁷⁷ This amount includes ransom payments and increased insurance costs. Ploch et al., "Piracy off the Horn of Africa."

²⁷⁸ Roger Middleton, "Piracy in Somalia: Threatening Global Trade, Feeding Local Wars." *Chatham House*, October 2008, http://www.chathamhouse.org.uk/files/12203_1008piracysomalia.pdf (accessed January 5, 2010).

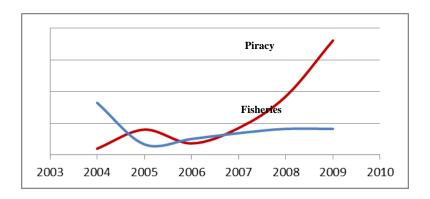


Figure 9. Somalia—Trends in piracy and fisheries 2004–2009.

Other factors affected the evolution of piracy and fisheries later on, but in 2005 the profound impact of the tsunami on coastal communities seems to have played a determining role. Somalis have always used coping mechanisms to survive hardships brought about by man-made or natural disasters. This involves diversifying sources of revenue to ensure that there is always something a family can depend on for subsistence. Even before the civil war, pastoralists in fertile regions planted crops, and some traditional farmers reared goats or sheep.²⁷⁹ Along the coast, many went to sea during the fishing season, between October and April, and returned to other activities, such as farming or cattle rearing, in the off-season.²⁸⁰ As years of violence and successive droughts curtailed most economic alternatives, fishing increasingly became the most important part of many coastal families' coping strategies.²⁸¹ The devastating effects of the tsunami on Somali fisheries took away this last honest option, and pushed many, for the first time, to consider piracy as a means of survival.

A year after the tsunami, only about 25 percent of Puntland's fishermen had the necessary equipment—boats and nets—to go out to sea, meaning more than 7,000 were

²⁷⁹ "Tsunami Worsens Existing Vulnerability in Somalia."

²⁸⁰ "WHO Health Action Response to the Tsunami Impact in Somalia," *World Health Organization* (2005). http://www.who.int/hac/crises/international/asia tsunami/som/report mission somalia.pdf (accessed September 17, 2010).

²⁸¹ "Tsunami Worsens Existing Vulnerability in Somalia."

out of work.²⁸² Not all out-of-work fishermen converted to piracy, but many did, and today, unlike the pre-tsunami years, most of Somalia's pirates have a fisheries background.²⁸³ Mohammed Yusuf Ali is representative of this switch.²⁸⁴ Just like many of his fishermen colleagues, this 33-year-old from Eyl lost his boat and fishing gear during the tsunami and sought recruitment in a pirate ring to support his family. Three years later, he was driving a brand new SUV and living in a mansion by the ocean.²⁸⁵

The rapid distribution of food prevented starvation in the immediate aftermath of the tsunami, but it took a full year for the distribution of fishing equipment to go into effect in places such as Puntland, and even then some areas never received any aid, such as Hobyo and Harardhere. Furthermore, many businesses in coastal communities depended on fisheries and were therefore negatively affected by the predicament of the fishermen. These conditions meant that there were enough idle, homeless, and desperate men along the coast—at least in 2005—to fill the ranks of the growing piracy business.

Like Ali and his friends from Eyl, many fishermen in other parts of Somalia similarly responded to the lure of piracy after the tsunami. Dahir Mohamed Hayeysi told the BBC how he and other fishermen in Harardhere switched to piracy in 2006 out of desperation. Life for them improved drastically after their first successful job, hijacking a WFP vessel in February 2007. In 2005, Farah Ismail Eid and five of his fellow fishermen traded their nets for AK-47s and set out to sea from the port of Garacad to attack foreign ships. Eid and his colleagues were arrested and jailed by Somaliland authorities in 2008, but he was unrepentant about his choice of switching to piracy. Sea

²⁸² Puntland's fishermen population was estimated at more than 10,000. "Feasibility Report on the fisheries sector in Puntland."

²⁸³ Ross and Ben-David, "Somali Piracy: An Escalating Security Dilemma." See also, Peter Chalk, "Piracy in the Horn of Africa: A Growing Maritime Security Threat," *CTC Sentinel, Vol. 3, 9,* September 2010, 12, http://www.ctc.usma.edu/sentinel/CTCSentinel-Vol3Iss9.pdf (accessed October 10, 2010).

²⁸⁴ Johannes Dieterich, "'We Will Slaughter Them': The Arduous Struggle Against Piracy Off the Somali Coast," *The Atlantic Times* (May 2009), http://www.atlantictimes.com/archive_detail.php?recordID=1751 (accessed October 28, 2010).

²⁸⁵ Dieterich, "'We Will Slaughter Them'."

²⁸⁶ Hassan, "'It's a pirate's life for me'."

²⁸⁷ Ibid.

²⁸⁸ Bengali, "An Interview with a Jailed Somali Pirate Leader."

If the number of possible recruits determines the growth rate of piracy, then one would expect piracy to have shown exponential growth after state collapse in 1991. Back then there were plenty of idle, homeless, and desperate young men. During the 1990s, though, these men had more choices. Many of them joined militia groups or resorted to some form of crime; others chose to stay with their families and moved into camps dependent on aid from NGOs. Yet others migrated abroad, or to those areas within Somalia with greater stability and a few remaining economic options. Those who migrated to coastal communities, especially in Puntland, found a vibrant fishery sector capable of providing for their subsistence needs at the very least.²⁸⁹ There is evidence that the coastal population increased throughout the 1990s, and just before the tsunami it was found that inhabitants of fishing communities, especially in Puntland, earned as much as five times more than the average Somali.²⁹⁰ Because the new migrants to coastal communities could earn an honest living in fisheries, it is likely that the criminal act of piracy did not have quite as strong an appeal as it did in later years.

Also, piracy in the 1990s was a clan-based affair, and it would not have been easy even for the criminal-minded migrant to find a role in it. Those responsible for most acts of piracy back then were from the *Majerteen* clan in Puntland, from which they derived protection and to whose leaders they paid loyalties in cash or kind.²⁹¹ Outsiders who could not get into these closed groups could form a group of their own, but then they would not have benefitted from the protection and clan networks that made the ransom process possible. They also risked getting into trouble with the dominant clan groups by unknowingly attacking a vessel belonging to, or protected by, the *Majerteen*.²⁹²

The business model that characterizes Somali piracy today is somewhat tied to clan affiliations—as are most things in Somalia—but these ties are loose enough for

²⁸⁹ Prewar statistics (discussed in Chapter II) showed that seasonal fishermen outnumbered permanent fishermen, but the reverse became true by 2005 confirming that many more people depended principally on fisheries as other economic opportunities disappeared. This reversal in trend is also due to increased migration towards the coast after state collapse.

 $^{290\ \}hbox{``Tsunami}$ Inter Agency Assessment Mission: Northeast Somali Coastline.''

²⁹¹ Hansen, "Piracy in the greater Gulf of Aden," 24.

²⁹² Hansen, "Piracy in the greater Gulf of Aden." *Majerteen* businessmen got their goods delivered by commercial vessels in Puntland ports without much trouble.

outsiders to find a niche. Recruitment is based more on skill sets than on clan affiliations.²⁹³ Although there were always a high number of poverty-stricken potential recruits, it was the change in the organization of Somali piracy from the 1990s to the 2000s that better accounts for its rapid growth in the post-tsunami years.

Piracy had started to take root along the Somali coast long before the tsunami, and, with the advent of the business model, it was destined for exponential growth. The tsunami simply served as a catalyst, providing an extra motive and skilled labor, to a process whose outcome was inevitable. First, the tsunami waves that washed rusted containers ashore brought to the fore allegations of toxic waste dumping and increased Somalis' frustration with the international community. Second, by destroying fishing equipment and putting many fishermen out of work, the tsunami made available skilled labor for pirate gangs. Before the tsunami, however, some fishermen had already turned to piracy, full-time or part-time, and after the tsunami there were many more who were considering giving up their lifelong trade to embrace it.²⁹⁴ The lure of instant wealth at minimal risk was too strong to ignore, and there is little doubt that the leaders of pirate groups would have been able to get the fishermen they needed even if fisheries production had remained at its pre-tsunami level.²⁹⁵ Pirate groups today are typically made up of ex-fishermen, ex-militiamen, and a few technicians, each recruited for the specific skills they bring in.²⁹⁶ Most of today's pirates tend to have a background in fisheries²⁹⁷—not surprising since fisheries was the last honest source of livelihood for many along the coast—but they nonetheless continue to be employees in a business controlled by profit-seeking entrepreneurs.

²⁹³ Chalk, "Piracy in the Horn of Africa," 12.

²⁹⁴ Hassan, "'It's a pirate's life for me'."

²⁹⁵ In recent years boat owners have found it increasingly difficult to put together a fishing crew, as they cannot compete with the more lucrative offers of pirate recruiters. See Hansen, "Piracy in the greater Gulf of Aden," 9.

²⁹⁶ Though piracy is a relatively low-tech business, it needs technicians capable of operating shipboard communication and navigation equipment permitting them to take control of a captured vessel and communicate with its owners. Ross and Ben-David, "Somali Piracy: An Escalating Security Dilemma."

²⁹⁷ Ross and Ben-David, "Somali Piracy: An Escalating Security Dilemma." See also Chalk, "Piracy in the Horn of Africa," 12.

Reflecting on piracy's economic roots, it is clear that the need to survive pushed many out-of-work coastal dwellers in Somalia—such as Ali in Eyl and Hayeysi in Harardhere—to become pirates after the tsunami. The fact that the fisheries sector, which used to be the basis of the coastal economy, never grew back to its pre-tsunami level means that there was little or no incentive for former fishermen to return to their trade. In comparison, the Asian financial crisis in 1997 put many coastal inhabitants in Southeast Asia out of work, and young men with a background in the maritime trade industry or in fisheries soon found piracy to be a rational choice in the absence of alternative sources of revenue.²⁹⁸ Piracy in the region skyrocketed, and until 2005 the waters within the Strait of Malacca were considered the most dangerous in the world. As Indonesia and other Southeast Asian countries recovered from the financial crisis, ²⁹⁹ there was a notable decrease in piracy in the region. Piracy was reduced by as much as 65 percent between 2003 and 2008;³⁰⁰ and only two attacks were attempted in the Strait of Malacca in 2008, down from 12 in 2005.³⁰¹ Of course, economic recovery also coincided with a strong repressive regional strategy at sea. Even so, the influence of sudden economic hardship on the rise in piracy in that part of the world was quite clear. Worth noting is that Asian piracy never gained the sophistication and organization found in Somalia's business model. The general trend of pirate acts in Southeast Asia was to board vessels, mostly at anchor and at night, to seize or steal cargo, equipment, cash and the personal items of the crew.³⁰² In the few cases where crew members were kidnapped for ransom, the amounts paid were below \$20,000.303 Most attacks were small scale and could be classified as a coping mechanism during times of hardship—a temporal situation that was later

²⁹⁸ Rosenberg, "The Political Economy of Piracy in the South China Sea," 3, 47.

²⁹⁹ Mohamad Al-Arief, "Ten Years after the Financial Crisis, East Asian Economies Are Going Strong," *The World Bank*, http://go.worldbank.org/BDH4KSBKM0 (accessed March 7, 2010).

³⁰⁰ Storey, "Calming the Waters in Maritime Southeast Asia."

^{301 &}quot;2009 Annual IMB Piracy Report."

³⁰² Catherine Zara Raymond, "Piracy in Southeast Asia: new trends, Issues and Responses," *Institute of Defense and strategic Studies Singapore*, October 2005, http://www.asiaquarterly.com/content/view/30/ (accessed February 1, 2010).

³⁰³ Raymond, "Piracy in Southeast Asia."

reversed through a change in economic fortune. Somali pirates today are far richer than Somali fishermen ever were, so unlike in Asia, Somali-based piracy will likely continue even if the fisheries sector is revitalized.

The prolonged absence of a state authority in Somalia continues to present uniquely favorable conditions for the development of piracy. The tsunami caused more devastation to Asian than Somali coastal communities, and though the former received more aid than the latter, many Asian fishermen too suffered life-altering losses. One might have expected these out-of-work fishermen to resort to piracy, but statistics show that piracy in the area has been on the decline since regional countermeasures went into effect in July 2004.³⁰⁴ It seems that apart from the socio-cultural differences between the two areas, the presence of a law enforcing authority in the Southeast Asian states has been a crucial factor. Also, some of the world's poorest communities can be found near oceans with heavy maritime traffic, but that has not pushed them to resort to piracy. The case of Yemen is very telling. Just like Somalia, it borders the Red Sea, the Gulf of Aden, and the Indian Ocean. It is by far the poorest country in the Middle East and more than 25 percent of its population, mostly coastal dwellers, live below the poverty line and have done so for generations.³⁰⁵ Yet, Yemenis have been more the victims than the perpetrators of piracy in the area.³⁰⁶ Again, the difference could be explained by the presence of a law enforcing authority in Yemen, and its absence in Somalia. James Tong's Rational Choice Model applies here. It contends that in times of hardship, men consider criminality to be one of many survival strategies, but it is only in the absence of certain and severe punishment that the urge for criminal behavior actually translates into an increase in criminal activities.³⁰⁷ In Somalia, lawlessness has guaranteed impunity for

³⁰⁴ Storey, "Calming the Waters in Maritime Southeast Asia."

^{305 &}quot;The Republic of Yemen – Poverty and Wealth," *Encyclopedia of the Nations*, http://www.nationsencyclopedia.com/economies/Asia-and-the-Pacific/Yemen-POVERTY-AND-WEALTH.html (accessed October 10,2010).

^{306 &}quot;Somali Piracy: Global Overview," *British Broadcasting Corporation*, April 17, 2009, http://news.bbc.co.uk/2/hi/africa/8003124.stm (accessed January 16, 2010).

³⁰⁷ James Tong, "Rational Outlaws: Rebels and Bandits in the Ming Dynasty, 1368-1644," in *Rationality and Revolution*, ed. Michael Taylor (Cambridge; New York: Cambridge University Press, 1988), 128.

many years, especially on land, and has allowed piracy to benefit from safe havens and the superior organization that accounts for its current success.

There is today a stronger link between piracy and fisheries in Somalia than there was in the pre-tsunami years. Former fishermen constitute an important element of pirate gangs, outnumbering militiamen who dominated in previous years. Their boats are used more frequently to launch attacks, and it is the presence of fishing gear onboard suspected mother ships that provides pirates with an alibi whenever they have the misfortune of running into international naval patrols. A decline in fisheries over several years and the sudden loss of assets after the tsunami pushed fishermen toward piracy, but this still does not account for the latter's exponential growth. As indicated above, fishermen have always been mere employees, playing little more than a secondary role in piracy, and could never have pushed piracy to its current levels. Though a rise in piracy coincided with a decline in fisheries during this period, no causal relationship could be established between the two. Onward from 2005, piracy was driven by profit-minded businessmen who could have achieved their objectives irrespective of trends in artisanal fish production.

V. CONCLUSION

A. SUMMARY

Trends in fisheries and piracy examined over the past five decades do not suggest a direct relationship between the economic status of Somali fishermen and the level of piracy off the HOA. There were many periods in Somalia's history when a drastic decline in fisheries did not coincide with a rise in piracy. In fact, piracy off Somalia's long coastline was either nonexistent or stayed insignificantly low until 2005, even though fisheries there experienced a decline at several points in the 1970s, early 1980s, and in the immediate aftermath of state collapse in 1991. Apart from the year 2005, a rise in piracy and a decline in fisheries never happened simultaneously, or close enough in time for the latter to influence the former. The singular exception in 2005, which saw piracy rising as fisheries declined, was shown in Chapter IV to have resulted more from other factors, like the maturing of the business model than from the survival imperative of local fishermen.

The idea of piracy as an organized, profit-seeking enterprise originated from the central coast of Somalia, and by 2005 it had developed into a thriving business. Just like the militia groups responsible for acts of piracy in the 1990s, this self-sustaining business model continued to use grievances from coastal communities—notably toxic waste dumping and illegal fishing by foreign vessels—to gain local support, but its underlying goal was to maximize profits by attacking vessels at sea that could yield ransom payments. This business model is unconcerned with the plight of Somali fishermen, as attested to by the fact that the millions of dollars received in ransoms so far have never been used to improve the fisheries sector. Fishermen responded to the lure of easy money, just as do many other young Somalis, but they were always mere employees in this criminal enterprise, driven first by warlords in the 1990s, and then later by businessmen. Piracy, especially under the business model, holds the promise of instant wealth and the easiest way to break out of Somalia's misery.

The enduring condition of statelessness, frequent and prolonged droughts, as well as intermittent fighting have combined in the past twenty years to produce misery in a country that was already one of the world's poorest before 1991. The need to survive pushed many Somalis to emigrate and others to turn to crime. Whereas poverty and desperation have defined many Somalis' lives for the past twenty years, even longer for some, piracy only became a significant threat five years ago. This huge gap in time certainly disqualifies survival as a possible cause of Somali piracy. Furthermore, several coastal communities in other parts of the world have lived in extreme poverty for many decades without resorting to piracy.

Somali frustration over IUU fishing could be sufficient motive for aggression at sea, but it fails to explain why piracy rose sharply after 2005, and not before then. What makes Somalia unique and accounts for the exponential rise in piracy off its shores in recent years is instead a combination of misery, absence of law enforcement, and the opportunistic nature offered by the business model. Even though misery and lawlessness have both characterized Somalia for a couple of decades, it was only in 2003 that the profit-maximizing scheme of the business model was put in place to exploit the numerous opportunities presented by heavy traffic at sea. The adaptive nature of the business model has ensured exponential growth in Somali piracy even in the face of very strong international mobilization around counter-piracy efforts.

B. RECOMMENDATIONS

Since 2008, a series of UNSCR permitted the deployment of an impressive armada of naval vessels from the U.S., the North Atlantic Treaty Organization (NATO), the EU, China, India, Japan, Malaysia, Russia, and Singapore.³⁰⁸ The maritime community takes comfort in the presence of the world's best naval forces off the HOA, and it is quite conceivable that in their absence the piracy problem would be worse. Though the number of attacks has continued to rise, the annual percentage of successful

³⁰⁸ Harwood, "Multinational Cooperation Tries to Take Fight to Somalia's Pirates."

hijackings has decreased since naval patrols started in 2008.³⁰⁹ Still, the number of hijacked vessels rose from 42 in 2008 to 47 in 2009, and some vessels were even taken within the IRTC, where maximum protection from naval forces is promised.³¹⁰ Also, efforts to judge and incarcerate pirates are plagued by many legal loopholes, low funding, and absence of political will among regional partners. Those with adequate judicial systems have been reluctant to conduct trials on their home soil, preferring to dump captured pirates in Kenya, and it was not until June 2010 that the first Somali pirates were tried in Europe and in the U.S..³¹¹ Thus, despite great efforts by the international community, piracy in the HOA continues to rise suggesting that the current counterpiracy approach is flawed. The findings of this thesis suggest a few alternatives.

1. Interdict IUU fishing

There is the perception, at least within Somalia, that the strong naval presence at sea protects the many European and Asian vessels involved in IUU fishing and toxic waste dumping—both being illegal activities under international law, but overlooked by the international community and its law enforcing navies in the area.³¹² This perception is reinforced by reports that Spanish forces have in the past detached themselves from counter-piracy duties to protect their flag vessels engaged in illegal fishing close to Somali shores.³¹³ When the Spanish flagged fishing vessel *Alakrana* was hijacked by

^{309 &}quot;2009 Worldwide Piracy Figures Surpass 400," *International Chamber of Commerce*, January 14, 2010, http://www.icc-ccs.org/index.php?option=com_content&view=article&id=385:2009-worldwide-piracy-figures-surpass-400&catid=60:news&Itemid=51 (accessed February 4, 2010).

^{310 &}quot;2009 IMB Annual Piracy Report."

³¹¹ Julio Godoy, "Somalia: Questions Abound about EU's 'Combating' of Piracy," *Inter Press Service*, June 16, 2010, http://ipsnews.net/news.asp?idnews=51841 (accessed September 17, 2010).

³¹² No vessels have been boarded or chased out of Somali waters by the international navies for IUU fishing of toxic waste dumping. "Is the EU protecting illegal fishing vessels in Somalia waters?" *The Business Daily*, September 18, 2010, http://www.businessdailyafrica.com/Is%20the%20EU%20protecting%20illegal%20fishing%20vessels%20

in% 20Somalia% 20waters/-/539546/941126/-/view/printVersion/-/9k0ubjz/-/index.html (accessed September 18, 2010). See also "Somalis Speak Out: Why We Do Not Condemn Our Pirates," *The San Francisco Bay View*.

³¹³ Hansen, "Piracy in the greater Gulf of Aden," 13.

Somali pirates in 2009, Spanish forces made several unsuccessful attempts to free it, and when the vessel was later released after a \$4 million ransom no investigations were carried out by Spanish authorities.³¹⁴

There have been calls by the international community and within the EU itself to address IUU fishing, both as a means to preserve the environment and maritime resources around Somalia, and as the first step toward a more comprehensive strategy against piracy. The findings of this thesis support the contention by proponents of this comprehensive approach that the continuation of these illegal activities by foreign commercial vessels undermines counter-piracy efforts and reinforces the legitimacy pirates enjoy at home. In a bid to curtail IUU fishing, UN officials suggested in 2006 that an embargo be enforced on fish coming out of Somali waters, but the proposal was rejected by the UN Security Council. Like Spain, many of the countries participating in counter-piracy efforts are also those who benefit the most from illegal fishing in Somali waters. The EU for its part asserts that its forces protect and reassure only those legitimate fishermen operating on the high seas outside Somalia's EEZ. Based on piracy's growing profitability, preventing IUU fishing is unlikely to stop it, but prevention would help, both by reducing the number of potential targets and removing the legitimizing myth on which the business model thrives.

2. Revive Artisanal Fisheries

Though it was found in this study that trends in fisheries did not influence the level of maritime piracy in Somalia, no counter-piracy measure there can have success unless the perpetrators of piracy are offered genuine alternatives. The fisheries sector presents the best option for many reasons. First, it would impact the same communities that currently depend on piracy. Second, the fisheries sector has been shown to have ample potential for growth, and was suffers mostly from poor management—a situation

^{314 &}quot;Is the EU protecting illegal fishing vessels in Somalia waters?"

^{315 &}quot;Is the EU protecting illegal fishing vessels in Somalia waters?"

³¹⁶ Tharoor, "How Somalia's Fishermen Became Pirates."

^{317 &}quot;Pirates capture fishing vessel," *European Union Naval Force – Somalia*, October 2, 2010, http://www.eunavfor.eu/2009/10/pirates-capture-fishing-vessel/ (accessed October 28, 2010).

that could be corrected through training and direct material assistance from the international community to local groups. By developing markets for the different species and building cold rooms to overcome the conservation problem, the international community could turn Somali fisheries into a self-sustaining business sector. Third, though piracy attracts recruits from far and wide, former fishermen, with their deep knowledge of the sea, are an important component of pirate groups.³¹⁸ Taking them out of the fight would greatly assist counter-piracy efforts. Most pirates are in it for the money and would like to retire to a more legitimate business after a good catch³¹⁹—fisheries would grant them this option.

It should be remembered that the fisheries sector thrived in Somalia long after the state collapsed in 1991.³²⁰ The great challenge here lies in how to engage the coastal communities so that they come to believe in the fisheries industry again. As pointed out by Murphy,³²¹ Somalia is a failed country, but many of its communities are very functional. There is room for sub-state engagement, either through specialized international organizations, such as the FAO, or through friendly Muslim nations, such as Saudi Arabia and the United Arab Emirates, who have already demonstrated such capacity especially, after the tsunami.³²²

3. Make Piracy More Risky

The biggest risk to pirates right now is to get caught and possibly be thrown in jail for a while. Pirates generally operate away from warships patrolling the area so they do not get caught, and are very aware of the legal loopholes that facilitate their release even

³¹⁸ Hansen, "Piracy in the greater Gulf of Aden."

³¹⁹ Hassan, "'It's a pirate's life for me'."

³²⁰ "Fishery and aquaculture Country Profiles: Somalia." *Food and Agricultural Organization* (n. d.), http://www.fao.org/fishery/countrysector/FI-CP_SO/3/en (accessed February 18, 2010).

³²¹ Martin Murphy, "Somali Piracy: Not Just a Naval Problem," *Center for Strategic and Budgetary Assessments* (April 16, 2009). http://www.csbaonline.org/4Publications/PubLibrary/B.20090417.Somali_Piracy.pdf (accessed January 5, 2010).

^{322 &}quot;UAE – Development Aid," *UAE Interact*. http://www.uaeinteract.com/government/development_aid.asp (accessed October 12, 2010).

on those rare occasions when they do get caught.³²³ Individual nations with greater stakes in maritime trade than Kenya should develop the necessary legal framework for trying and sentencing pirates. Signatories of UNCLOS are aware of their rights and obligations in prosecuting captured pirates,³²⁴ but few have actually developed national legislation to tackle the issue; now is the time to do so. The certainty and severity of punishment would make the risk of becoming a pirate significantly higher than the risk of not becoming one.³²⁵ The rational thinkers among the pirates will eventually opt out, and there would be fewer recruits.

4. Make Piracy Less Profitable

Piracy is the best business in Somalia, attracting recruits with the promise of a better life that would otherwise be impossible to attain.³²⁶ It becomes too difficult to not pay ransom after sailors are kidnapped, so the focus should be on prevention. If pirates go for many months without any successful attacks, they would have to seek other business opportunities such as revitalizing Somalia's fisheries. The challenge is to harden targets so that the pirates' every attempt is foiled. Since warships are not able to protect every single vessel within the very large area of concern, 2.5 million square miles, individual vessels should invest in training and equipment to reduce their vulnerabilities. For example, the construction and use of safe rooms where crews under attack can seek refuge have been successful in delaying hijackings long enough for assistance from warships to arrive. Also, it is abnormal that ships are attacked within the IRTC. As much as possible, transit within the recommended corridor and elsewhere in the Indian Ocean should be in groups and under escort from warships in the area. This will cause some delays for the commercial vessels, but the achievement of safe passage for all will hopefully have the long-term effect of putting pirates out of business.

^{323 &}quot;Navy releases Somali pirates caught red-handed," *Times online*, November 29, 2009, http://timesonline.co.uk/tol/news/world/africa/article6936318.ece (accessed January 24, 2010).

³²⁴ Martin Murphy, "Piracy and UNCLOS: Does International Law Help Regional States Combat Piracy?" in *Violence at Sea: Piracy in the Age of Global Terrorism*, Edited by Peter Lehr, New York, Oxon: Routledge, 2007.

³²⁵ Tong, "Rational outlaws."

³²⁶ Hassan, "'It's a pirate's life for me'."

It is clear that repression at sea alone does not work, and will not work until steps are taken to engage coastal communities on land. The above recommendations are all applicable within the current context of statelessness in Somalia—a situation that has endured for twenty years and shows no signs of changing in the foreseeable future.

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LIST OF REFERENCES

- "1995 IMB Annual Piracy Report." ICC-International Maritime Bureau, January 1996.
- "2000 IMB Annual Piracy Report." ICC International Maritime Bureau, January 2001.
- "2004 IMO Annual Piracy Report." International Maritime Organization, May 5, 2005.
- "2009 IMB Annual Piracy Report." ICC International Maritime Bureau, January 2010.
- "2009 Worldwide Piracy Figures Surpass 400." *International Chamber of Commerce*, January 14, 2010. http://www.icc-ccs.org/index.php?option=com_content&view=article&id=385:2009-worldwide-piracy-figures-surpass-400&catid=60:news&Itemid=51 (accessed February 4, 2010).
- Abdullahi, Najad. "Toxic Waste Behind Somali Piracy." *Aljazeera*, last updated October 11, 2008. http://english.aljazeera.net/news/africa/2008/10/2008109174223218644.html (accessed September 18, 2010).
- "Africa Environmental Outlook: Harvesting of Coastal and Marine Resources in Eastern Africa." *Grid-Arendal*, 2002. http://grida.no/aeo/107.htm (accessed August 4, 2010).
- Al-Arief, Mohamad. "Ten Years after the Financial Crisis, East Asian Economies Are Going Strong." *The World Bank*. http://go.worldbank.org/BDH4KSBKM0 (accessed March 7, 2010).
- "Anti Shipping Activity Messages (ASAM) reports." 1985 1999. *Federation of American Scientists*. http://www.fas.org/irp/world/para/pirates.htm.
- Bengali, Shashank. "An Interview with a Jailed Somali Pirate Leader." *The Christian Science Monitor*, May 3, 2009.

 http://www.csmonitor.com/World/Africa/2009/0503/p06s12-woaf.html (accessed April 18, 2010).
- Bennett, Andrew, and Alexander George. "Process Tracing in Case Study Research."
 October 19, 1997.
 http://users.polisci.wisc.edu/kritzer/teaching/ps816/ProcessTracing.htm (accessed March 19, 2010).

- Bihi, A. I. "Somalia National Report." *UNEP Regional Seas Reports and Studies* 51 (1984).

 http://www.unep.org/regionalseas/publications/reports/RSRS/pdfs/rsrs051.pdf (accessed July 14, 2010).
- Billings, Sharon. "U.S. Exporters and Investors Have an Opportunity To Help Somalia Develop Its Fisheries Industry." *Business America*, September 25, 1989. http://findarticles.com/p/articles/mi_m1052/is_n19_v110/ai_7955623/pg_3/?tag=content;col1 (accessed March 4, 2010).
- Bowden, Mark. "Black Hawk Down." *The Philadelphia Enquirer*, November 16, 1997. http://inquirer.philly.com/packages/somalia/nov16/rang16.asp (accessed July 20, 2010).
- Brune, Lester H. *The United States and Post-Cold War Interventions: Bush and Clinton in Somalia, Haiti and Bosnia 1992 1998.* Claremont, CA: Regina Books, 1998.
- Bruyas, Florian. "Somaliland Puntland State of Somalia." *UN Habitat*. http://www.unhabitat.org/downloads/docs/4417_21585_somaliland.pdf (accessed October 27, 2010).
- Burale, Daahir Mohamed. "FAO Post Tsunami Assessment Mission to Central and South Coast of Somalia." *Food and Agricultural Organization*, 2005. ftp://ftp.fao.org/FI/DOCUMENT/tsunamis-05/somalia/cons-miss-rep/Burale_jun-aug_05.pdf (accessed May 12, 2010).
- Carafano, James Jay, Richard Weitz, and Martin Edwin Andersen. "Maritime Security: Fighting Piracy in the Gulf of Aden and Beyond." *Heritage special Report*, June 24, 2009. http://www.heritage.org/Research/NationalSecurity/sr0059.cfm (accessed January 24, 2010).
- Chalk, Peter. "Piracy in the Horn of Africa: A Growing Maritime Security Threat." *CTC Sentinel, Vol. 3, 9,* September 2010, 12. http://www.ctc.usma.edu/sentinel/CTCSentinel-Vol3Iss9.pdf (accessed October 10, 2010).
- "Coastal and Marine Ecosystems Somalia." *Earthtrends*, 2003.

 http://earthtrends.wri.org/pdf_library/country_profiles/coa_cou_706.pdf (accessed December 4, 2009).
- Cooke, Jennifer G., and Richard Downie. "African Conflicts and U.S. Diplomacy: Roles and Choices." *Center for Strategic and International Studies*, January 2010.

- "Countering Piracy off the Horn of Africa: Partnership and Action Plan." *U.S. National Security Council*, December 2008.

 http://www.marad.dot.gov/documents/Countering Piracy Off The Horn of Africa Partnership Action Plan.pdf (accessed February 28, 2010).
- "Country Profile: Somalia." *British Broadcasting Corporation*, January 1, 2010. http://news.bbc.co.uk/2/hi/africa/country_profiles/1072592.stm (accessed January 16, 2010).
- Crumley, Bruce. "Ridding Somalia of Pirates: Hard Choices for the West." *TIME Magazine*, April 29, 2009. http://www.time.com/time/world/article/0,8599,1894395,00.html (accessed October 3, 2010).
- "The Deadliest Tsunami in History?" *National Geographic News*, Updated January 7, 2005. http://news.nationalgeographic.com/news/pf/65467352.html (accessed September 2, 2010).
- Dieterich, Johannes. "'We Will Slaughter Them': The Arduous Struggle Against Piracy Off the Somali Coast." *The Atlantic Times*, May 2009. http://www.atlantictimes.com/archive_detail.php?recordID=1751 (accessed October 28, 2010).
- Eden, Dan. "Somali Pirates: The Other Side of the Story." Viewzone (n.d.). http://viewzone2.com/piratesx.html (accessed September 17, 2010).
- Elleman, Bruce A., Andrew Forbes, and David Rosenberg. "Piracy and Maritime Crime: Historical and Modern Case Studies." *Naval War College Newport Papers*, *35*, January 2010.
- Emathe, Francis Edukon. "Somalia: IGAD's Attempt to Restore Somalia's Transitional Federal Government." *Naval Postgraduate School*, December 2006. http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA462459 (accessed October 10, 2010).
- "European Commission Strategy for the Implementation of Special Aid to Somalia: 2002 2007." *European Commission*, 2001.

 http://ec.europa.eu/development/icenter/repository/print_so_csp_en.pdf (accessed July 29, 2010).
- "FAO Fishery Country Profile The Somali Republic." *Food and Agricultural Organization*, January 2005.

 http://www.fao.org/fi/oldsite/FCP/en/SOM/profile.htm (accessed January 10,2010).

- "FAO Situation Reports Somalia Tsunami." *Food and Agricultural Organization*, February 8, 2005.

 ftp://ftp.fao.org/FI/DOCUMENT/tsunamis_05/somalia/FAOAgencyReport-Somalia_08-02-05.pdf
 (accessed September 10, 2010).
- "Feasibility Report on the fisheries sector in Puntland." *United Nations Development Program*, April 2005.

 http://mirror.undp.org/somalia/pdf/Fisheries%20report%20Puntland%20complete.pdf (accessed August 10, 2010).
- Fielding, P. J., and B. Q. Mann. "The Somalia Inshore lobster Resource: A Survey of the Lobster Fishery of the North Eastern Region (Puntland) between Foar and Eyl during November 1998." *Somaliland Cyberspace*, June 1999. http://www.mbali.info/doc206.htm (accessed July 24, 2010).
- "Final Mission Report Somalia SHIFCO." *European Commission*, November 18, 1998. http://ec.europa.eu/food/fs/inspections/vi/reports/somalia/vi_rep_soma_1522-1998_en.pdf (accessed May 10, 2010).
- "Final Report Mid-term Evaluation of the First Rehabilitation Programme (FRP) for Somalia." *European Commission*, 1997.

 http://ec.europa.eu/europeaid/how/evaluation/evaluation_reports/reports/acp/9513-27_en.pdf (accessed July 20, 2010).
- "Fish Stat Plus." Food and Agricultural Organization. www.fao.org.
- "Fisheries statistical collection." *Food and Agricultural Organization*.

 http://www.fao.org/fishery/statistics/global-capture-production/4/en (accessed January 12, 2010).
- "Fishery and Aquaculture Country Profiles Somalia." *Food and Agricultural Organization*, last updated 2005. http://www.fao.org/fishery/countrysector/FI-CP_SO/3/en (accessed February 18, 2010).
- "Fishery Country Profile: The Somali Republic." *Food and Agricultural Organization*, January 2005. http://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_SO.pdf (accessed February 18, 2010).
- Gilpin, Raymond. "Counting the Cost of Somali Piracy." *United States Institute of Peace*, June 22, 2009. http://www.usip.org/files/resources/1_0.pdf (accessed January 17, 2010).
- Godoy, Julio. "Somalia: Questions Abound about EU's 'Combating' of Piracy." *Inter Press Service*, June 16, 2010. http://ipsnews.net/news.asp?idnews=51841 (accessed September 17, 2010).

- "Gulf of Aden, Red Sea, and Indian Ocean Transit." *US Department of Transportation*, September 9, 2009. http://www.marad.dot.gov/news_room_landing_page/maritime_advisories/adviso
 - http://www.marad.dot.gov/news_room_landing_page/maritime_advisories/advisory/advisory2009-07.htm (accessed March 2, 2010).
- Hansen, Stig Jarle. "Piracy in the greater Gulf of Aden: Myths, Misconception and Remedies." *Norwegian Institute for Urban and Regional Research*, October 2009. http://www.nibr.no/uploads/publications/26b0226ad4177819779c2805e91c670d.pdf (accessed February 19, 2010).
- Hanson, Stephanie. "Combating Maritime Piracy." *Council on Foreign Relations*, last updated January 7, 2010.

 http://www.cfr.org/publication/18376/combating_maritime_piracy.html (accessed February 11, 2010).
- Hari, Johann. "You Are Being Lied To About Pirates." *Huffington Post*, January 4, 2009. http://www.huffingtonpost.com/johann-hari/you-are-being-lied-to-abo_b_155147.html (accessed February 19, 2010).
- Harwood, Matthew. "Multinational Cooperation Tries to Take Fight to Somalia's Pirates." *Security Management*, September 2009. http://www.securitymanagement.com/news/multinational-cooperation-tries-take-fight-somalias-pirates-006197 (accessed January 24, 2010).
- Hassan, Mohamed Olad. "It's a pirate's life for me'." *British Broadcasting Corporation*, April 22, 2009. http://news.bbc.co.uk/go/pr/fr/-/2/hi/africa/8010061.stm (accessed February 27, 2010).
- "Hijacking of Relief Food Vessel to Somalia Forces WFP to Suspend Further Shipments." *World Food Program,* July 4, 2005.

 http://one.wfp.org/english/?ModuleID=137&Key=1338 (accessed September 18, 2010).
- "Human Development Report 1998 Somalia." *United Nations Development Programme*.

 http://hdr.undp.org/en/reports/nationalreports/arabstates/somalia/nhdr_1998_somalia-en.pdf (accessed July 20, 2010).
- "Human Development Report 2001 Somalia." *United Nations Development Programme*.

 http://hdr.undp.org/en/reports/nationalreports/arabstates/somalia/Somalia_2001_e
 n.pdf (accessed July 20, 2010).

- "Is the EU protecting illegal fishing vessels in Somalia waters?" *The Business Daily*, September 18, 2010.
 - http://www.businessdailyafrica.com/Is%20the%20EU%20protecting%20illegal%20fishing%20vessels%20in%20Somalia%20waters/-/539546/941126/-/view/printVersion/-/9k0ubjz/-/index.html (accessed September 18, 2010).
- Jimale, Abdullahi Mohamed. "After the Tsunami Fishing Settlements Survey/Somalia Indian Ocean Coastal Towns." *Basic Relief and Rural Development Network*, 2009.
 - http://www.reliefweb.int/rw/RWFiles2009.nsf/FilesByRWDocUnidFilename/SHI G-7VWF56-full_report.pdf/\$File/full_report.pdf (accessed July 8, 2010).
- Johnson, Rosita. "Somali Pirates Began as Volunteer Coast Guard." *People's World*, April 22, 2009. http://www.peoplesworld.org/somali-pirates-began-as-volunteer-coast-guard/ (accessed August 27, 2010).
- Kang, Harnit Kaur. "Gulf of Aden vs Malacca Strait: Piracy and Counter-piracy efforts." *Institute of Peace and Conflict Studies*, December 2009. http://ipcs.org/pdf_file/issue/IB135-SEARP-Harnit1.pdf (accessed January 17, 2010).
- Kraska, James, and Brian Wilson. "The Global Maritime Partnership and Somali Piracy." *Defense & Security Analysis*, 25:3, September 2009. http://pdfserve.informaworld.com/537205_793890206_915994269.pdf (accessed October 8, 2010).
- Kraska, James. "The Report on the U.S. Naval War College Workshop on Somali Piracy: Fresh Thinking for an Old Threat." *U.S. Naval War College*, April 28, 2009. http://www.usnwc.edu/Research---Gaming/International-Law/RightsideLinks/Piracy-Workshop-2009.aspx (accessed January 20, 2010).
- Kulmiye, Abdirahman Jama. "Militia vs Trawlers: Who is the Villain?" *The East African Magazine*, July 9, 2001. http://www.ecop.info/e-news/e-news-01-07-9.htm (accessed August 1, 2010).
- Leeson, Peter. "Better Off Stateless: Somalia Before and After Government Collapse." 2006. http://www.peterleeson.com/Better_Off_Stateless.pdf (accessed July 25, 2010).
- Lewis, I. M. A Modern History of the Somali. Athens, Ohio: Ohio University Press, 2002.
- "Maritime Security: Actions Needed to Assess and Update Plan and Enhance Collaboration among Partners Involved in Countering Piracy off the Horn of Africa." *United States Government Accountability Office*, September 2010. http://www.gao.gov/new.items/d10856.pdf (accessed September 30, 2010).

- McEvers, Kelly. "In Anti-Piracy Fight, Yemen May Be Part Of Problem." *National Public Radio*, May 8, 2009.

 http://www.npr.org/templates/story/story.php?storyId=103904390 (accessed September 5, 2010).
- Menkhaus, Ken. "Dangerous Waters." *Survival*, 51:1, 21–5.

 http://www.informaworld.com/smpp/content~content=a908599137~db=all~order=page (accessed May 7, 2010).
- ———. "Somalia: Too Big a Problem to Fail?" *Foreign Policy*, August 6, 2009. http://www.foreignpolicy.com/articles/2009/08/06/somalia too big a problem too fail?page=0,1 (accessed February 20, 2010).
- ———. "U.S. Foreign Assistance Somalia: Phoenix from the Ashes?" *Middle East Policy*, 5, 1, 1997.
- Middleton, Roger. "Piracy in Somalia: Threatening Global Trade, Feeding Local Wars." *Chatham House*, October 2008. http://www.chathamhouse.org.uk/files/12203_1008piracysomalia.pdf (accessed January 5, 2010).
- Mojon, Jean-Marc. "In the Heart of a Somali Pirate's Lair." *Agence France Presse*, September 2, 2010. http://www.thejakartaglobe.com/afp/in-the-heart-of-a-somali-pirates-lair/394359 (accessed September 17, 2010).
- Murphy, Martin. "Piracy and UNCLOS: Does International Law Help Regional States Combat Piracy?" In *Violence at Sea: Piracy in the Age of Global Terrorism*, edited by Peter Lehr. New York; Oxon: Routledge, 2007.
- ———. "Somali Piracy: Not Just a Naval Problem." *Center for Strategic and Budgetary Assessments*, April 16, 2009.

 http://www.csbaonline.org/4Publications/PubLibrary/B.20090417.Somali_Piracy/B.20090417.Somali_Piracy.pdf (accessed January 5, 2010).
- Mwangura, Andrew. "Somalia: Pirates or Protectors?" *Pambazuka News*, May 20, 2010. http://www.pambazuka.org/en/category/features/64575 (accessed May 24, 2010).
- ——. "Workshop on Fishing Communities and sustainable Developments in Southern and Eastern Africa: A small-scale fisheries perspective." *Seafarers' Assistance Program*, March 2006.
 - http://www.icsf.net/icsf2006/jspFiles/eastAfrica/pdfs/IUU%20fishing/esaandrewiuu.pdf.PDF (accessed July 12, 2010).

- Mynott, Adam. "Somalis Struggle to Rebuild Lives." *British Broadcasting Corporation*, January 13, 2005. http://news.bbc.co.uk/2/hi/africa/4169835.stm (accessed September 17, 2010).
- "Navies Struggle with Swarming Pirates." *British Broadcasting Corporation*, last updated April 1, 2010. http://news.bbc.co.uk/2/hi/africa/8598726.stm (accessed April 4, 2010).
- "Navy releases Somali pirates caught red-handed." *Times online*, November 29, 2009. http://timesonline.co.uk/tol/news/world/africa/article6936318.ece (accessed January 24, 2010).
- Nincic, Donna. "Maritime Piracy in Africa: The humanitarian dimension." *Institute for Security studies*, 2009.

 http://www.iss.co.za/dynamic/administration/file_manager/file_links/18NO3NIN_CIC.PDF?link_id=23&slink_id=8285&link_type=12&slink_type=13&tmpl_id=3">http://www.iss.co.za/dynamic/administration/file_manager/file_links/18NO3NIN_CIC.PDF?link_id=23&slink_id=8285&link_type=12&slink_type=13&tmpl_id=3">http://www.iss.co.za/dynamic/administration/file_manager/file_links/18NO3NIN_CIC.PDF?link_id=23&slink_id=8285&link_type=12&slink_type=13&tmpl_id=3">http://www.iss.co.za/dynamic/administration/file_manager/file_links/18NO3NIN_CIC.PDF?link_id=23&slink_id=8285&link_type=12&slink_type=13&tmpl_id=3">http://www.iss.co.za/dynamic/administration/file_manager/file_links/18NO3NIN_cIC.PDF?link_id=23&slink_id=8285&link_type=12&slink_type=13&tmpl_id=3">http://www.iss.co.za/dynamic/administration/file_manager/file_links/18NO3NIN_cIC.PDF?link_id=23&slink_id=8285&link_type=12&slink_type=13&tmpl_id=3">http://www.iss.co.za/dynamic/administration/file_manager/file_links/18NO3NIN_cIC.PDF?link_id=23&slink_id=8285&link_id=828
- Paulos, Abraham. "Prosecuting Piracy." *Foreign Policy Association*, April 23, 2009. http://www.fpa.org/topics_info2414/topics_info_show.htm?doc_id=893742 (accessed January 24, 2010).
- Pham, Peter. "Anti-Piracy, Adrift." *The Journal of International Security Affairs*, 18, Spring 2010. http://www.securityaffairs.org/issues/2010/18/pham.php (accessed October 26, 2010).
- "Piracy Off the Somali Coast: Workshop commissioned by the Special Representative of the Secretary General of the UN to Somalia, Ambassador Ahmedou Ould Abdallah." *United Nations Organization*, November 2008. http://www.imcsnet.org/imcs/docs/somalia_piracy_intl_experts_report_consolidat_ed.pdf (accessed January 12, 2010).
- "Pirates and Profiteers: How Pirate Fishing Fleets are Robbing People and Oceans." *Environmental Justice Foundation*, 2005.

 http://www.ejfoundation.org/pdf/pirates and profiteers.pdf (accessed July 30, 2010).
- "Pirates Capture Fishing Vessel." *European Union Naval Force Somalia*, October 2, 2010. http://www.eunavfor.eu/2009/10/pirates-capture-fishing-vessel/ (accessed October 28, 2010).
- Plaut, Martin. "Tsunami: Somalia's slow recovery." *British Broadcasting Corporation*, last updated December 26, 2005. http://news.bbc.co.uk/2/hi/africa/4560246.stm (accessed September 18, 2010).

- Ploch, Lauren, Christopher M. Blanchard, Ronald O'Rourke, R. Chuck Mason, and Rawle O. King. "Piracy off the Horn of Africa." *Congressional Research Service*, September 28, 2009. http://www.crs.gov (accessed through the Naval Postgraduate School Library October 10, 2009).
- Poten & Partners. "Pirates Threaten Ship Traffic In Gulf of Aden." *LNG in World arkets*, 2008.

 http://www.poten.com/search.aspx?query=pirates%20threaten%20ship%20traffic%20in%20gulf%20of%20aden (accessed October 4, 2010).
- Raymond, Catherine Zara. "Piracy and Armed Robbery in the Malacca Strait: a Problem Solved?" *Naval War College review*, summer 2009, 62:3.
- "Piracy in Southeast Asia: new trends, Issues and Responses." *Institute of Defense and strategic Studies Singapore*, October 2005.
 http://www.asiaquarterly.com/content/view/30/ (accessed February 1, 2010).
- "The Republic of Yemen Poverty and Wealth." *Encyclopedia of the Nations*.

 http://www.nationsencyclopedia.com/economies/Asia-and-the-Pacific/Yemen-POVERTY-AND-WEALTH.html (accessed October 10, 2010).
- "Reconstruction of Tsunami-damaged Xaafuun Town," *UN Habitat*, 2008.

 http://www.unhabitat.org/content.asp?cid=4541&catid=233&typeid=13&subMenuId=0# (accessed September 17, 2010).
- Reno, William. "Somalia and Survival in the Shadow of the Global Economy." *Somaliland Cyberspace*, February 2003. http://www.mbali.info/doc129.htm (accessed July 26, 2010).
- "Report of the Panel of Experts on Somalia pursuant to Security Council resolution 1425 (2002)." *United Nations Organization*, March 25, 2003.

 http://wwww.reliefweb.int/rw/RWFiles2003.nsf/FilesByRWDocUNIDFileName/ACOS-64CUS8-unsc-som-25mar.pdf/\$File/unsc-som-25mar.pdf (accessed July 20, 2010).
- "Report of the Panel of Experts on Somalia pursuant to Security Council resolution 1474 (2003)." *United Nations Organization*, November 4, 2003.

 http://wwww.reliefweb.int/rw/RWFiles2003.nsf/FilesByRWDocUNIDFileName/ACOS-64C9YU-unsc-som-04nov.pdf/\$File/unsc-som-04nov.pdf (accessed July 20, 2010).
- "Report on Acts of Piracy and Armed Robbery against Ships; MSC Circular 785." International Maritime Organization, March 17, 1997.

- "Review of Impacts of Illegal, Unreported and Unregulated Fishing on Developing Countries." *Marine Resources Assessment Group*, 2005.

 http://webarchive.nationalarchives.gov.uk/+/http://www.dfid.gov.uk/pubs/files/illegal-fishing-mrag-report.pdf (accessed July 19, 2010).
- Rosenberg, David. "The Political Economy of Piracy in the South China Sea." *Naval War College review*, Summer 2009, 62:3.
- Ross, Shani, and Joshua Ben-David. "Somali Piracy: An Escalating Security Dilemma." *International Institute for Counter-Terrorism*, August 20, 2009. http://www.ict.org.il/Articles/tabid/66/Articlsid/745/currentpage/1/Default.aspx (accessed January 24, 2010).
- Salopek, Paul. "Somali piracy 'like a resource swap'." *The Seattle Times*, October 15, 2008. http://seattletimes.nwsource.com/cgi-bin/PrintStory.pl?document_id=2008267714&zsection_id=2003905675&slug=pirates15&date=20081015 (accessed September 17, 2010).
- Schaeffer, Brett. "Piracy: A Symptom of Somalia's Deeper Problems." *The Heritage Foundation*, April 17, 2009. http://www.heritage.org/research/africa/wm2398.cfm (accessed December 12, 2009).
- "Seminar for Fisheries Statistics as a Means for Improved Fisheries Management." *Food and Agricultural Organization*, 1983. http://www.fao.org/docrep/field/255089.htm#H1003 (accessed May 3, 2010).
- "Somali Fishing Industry Has Potential For Growth." *National Oceanic and Atmospheric Administration*, 1982. http://spo.nmfs.noaa.gov/mfr4412/mfr44124.pdf (accessed November 4, 2009).
- "Somali Islamic Courts Crack Down on Piracy." November 23, 2006.

 http://www.noonsite.com/Members/doina/R2006-11-22-3 (accessed October 4, 2010).
- "Somali Piracy: Global Overview." *British Broadcasting Corporation*, April 17, 2009. http://news.bbc.co.uk/2/hi/africa/8003124.stm (accessed January 16, 2010).
- "Somali Pirates Turn Villages into Boomtowns." *Associated Press*, updated November 19, 2008. http://www.msnbc.com/id/27806965/ (accessed May 24, 2010).
- "Somalia The Economy." *The Library of Congress* (n. d.). http://www.mongabay.com/reference/country_studies/somalia/ECONOMY.html (accessed October 21, 2010).

- "Somalia after the Tsunami." *Science in Africa*, January 2005.

 http://www.scienceinafrica.co.za/2005/january/somalia.htm (accessed July 18, 2010).
- "Somalia Tsunami Relief Program: Quarterly/Final Program Report." *World Concern Development Organization*, August 4, 2005. http://pdf.usaid.gov/pdf_docs/PDACF237.pdf (accessed July 8, 2010).
- "Somalia: Riverine and Coastal People of Non-Somali Origin." *The Library of Congress country studies*.

 http://www.photius.com/countries/somalia/society/somalia_society_riverine_and_coastal~1597.html (accessed July 14, 2010).
- "Somaliland in Figures." *The World Bank*, 2004.

 http://siteresources.worldbank.org/INTSOMALIA/Resources/somaliland in figures 04.pdf (accessed August 4, 2010).
- "Somalis Speak Out: Why We Do Not Condemn Our Pirates." *San Francisco Bay View*, April 13, 2009. http://sfbayview.com/2009/somalis-speak-out-why-we-don%E2%80%99t-condemn-our-pirates/ (accessed September 17, 2010).
- "The State of the Environment in Somalia." *United Nations Environment Programme*, 2005. http://www.unep.org/depi/programmes/Somalia_Final.pdf (accessed December 5, 2009).
- Storey, Ian. "Calming the Waters in Maritime Southeast Asia." *Asia Pacific Bulletin*, February 18, 2009.

 http://scholarspace.manoa.hawaii.edu/bitstream/10125/7781/3/apb029%5B1%5D.pdf.txt (accessed February 10, 2010).
- "Strait of Malacca." *Encyclopedia Britannica*.

 http://www.britannica.com/EBchecked/topic/359411/Strait-of-Malacca (accessed February 25, 2010).
- Stuhldreher, Katie. "To Turn the Tide on Piracy in Somalia, Bring Justice To Its Fisheries." *Christian Science Monitor*, November 20, 2008. http://www.csmonitor.com/Commentary/Opinion/2008/1120/p09s01-coop.html (accessed February 18, 2010).
- "The Supreme Islamic Courts Union." *Global Security* (n. d.).

 http://www.globalsecurity.org/military/world/para/icu.htm (accessed October 3, 2010).

- Tello, Gonzalo. "Fisheries Tsunami Emergency Programme Somalia." *Food and Agricultural Organization*, October 2005. http://www.fao.org/fi/oldsite/eims_search/1_dett.asp?lang=en&pub_id=198847 (accessed June 2, 2010).
- Tharoor, Ishaan. "How Somalia's Fishermen Became Pirates." *TIME*, April 18, 2009. http://www.time.com/time/world/article/0,8599,1892376,00.html (accessed January 8, 2010).
- "There are Two Piracies in Somalia." *African Loft*, April 13, 2009. http://www.africanloft.com (accessed February 27, 2010).
- Tomkins, Steve. "Fishermen seeking a bigger catch." *Church Times*, July 3, 2009. http://www.churchtimes.co.uk/content.asp?id=77357 (accessed February 19, 2010).
- Tong, James. "Rational Outlaws: Rebels and Bandits in the Ming Dynasty, 1368-1644." In *Rationality and Revolution*, edited by Michael Taylor. Cambridge; New York: Cambridge University Press, 1988.
- "Trade Competitiveness Map Somalia." *International Trade Center*.

 http://www.trademap.org/countrymap/Product_SelCountry_TS.aspx (accessed August 7, 2010).
- "Tsunami Inter Agency Assessment Mission: Northeast Somali Coastline." World Health Organization, February 2005.

 http://www.who.int/hac/crises/international/asia_tsunami/som/somalia_report_8fe
 b.pdf (accessed July 8, 2010).
- "Tsunami Reconstruction: Challenges Ahead and Funding Needs." *Food and Agricultural Organization* (n. d.). http://www.fao.org/tsunami/challenge.asp (accessed May 16, 2010).
- "Tsunami Reconstruction: Somalia Status Report." *Food and Agricultural Organization*, October 31, 2005.

 ftp://ftp.fao.org/FI/DOCUMENT/tsunamis_05/somalia/FAOAgencyReport-Somalia_31-10-05.pdf (accessed September 10, 2010).
- "Tsunami Reconstruction: Somalia Status Report." Food and Agricultural Organization, March 31, 2006.

 ftp://ftp.fao.org/FI/DOCUMENT/tsunamis_05/somalia/FAOAgencyReport-Somalia_31-03-06.pdf (accessed September 10, 2010).
- "Tsunami Worsens Existing Vulnerability in Somalia." *Forced Migration Review*, 2005. http://www.fmreview.org/FMRpdfs/Tsunami/26.pdf (accessed July 12, 2010).

- "UAE Development Aid." *UAE Interact*.

 http://www.uaeinteract.com/government/development_aid.asp (accessed October 12, 2010).
- "United Nations Convention on the Law of the Sea." *United Nations Organization*, 1982. http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf (accessed October 26, 2010).
- Van Zalinge, N. P. "Summary of fisheries and resources information for Somalia." *Food and Agricultural Organization* (n.d.). http://www.fao.org/docrep/field/303859/3038590b.htm (accessed May 16, 2010).
- Villar, Roger. *Piracy Today: Robbery and Violence at Sea since 1980.* London: Conway Maritime Press, 1985.
- Waldo, Mohamed Abshir. "Somali piracy: the other side of the coin." *African Prospects*, October 2009. http://www.exacteditions.com/exact/browse/576/929/5847/2/9/0/ (accessed through the Naval Postgraduate School Library January 10, 2010).
- ——. "The Two Piracies in Somalia: Why the World Ignores the Other?" *American Chronicle*, January 7, 2009. http://www.americanchronicle.com/articles/view/87075 (accessed May 8, 2010).
- "WFP Convoy Reaches Victims of Tsunami Waves in Somalia." *World Food Program*, December 30, 2004.

 http://one.wfp.org/newsroom/in_brief/asia/tsunami/041231_tsunami.asp?section=2&sub_section=2 (accessed September 18, 2010).
- "WHO Health Action Response to the Tsunami Impact in Somalia." World Health Organization, 2005.

 http://www.who.int/hac/crises/international/asia_tsunami/som/report_mission_somalia.pdf (accessed September 17, 2010).
- Yassin, Mohamed. "Somali Fisheries Development and Management." *Somaliland CyberSpace*, June 1981. http://www.mbali.info/doc278.htm (accessed July 16, 2010).
- Zeller Jr., Tom. "Off Somalia, There Be (Lots of) Pirates." *The New York Times*, February 26, 2007. http://thelede.blogs.nytimes.com/2007/02/26/off-somalia-there-be-lots-of-pirates/?pagemode=print (accessed September 17, 2010).

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